



OUTSOURCED SERVICES SCRUTINY PANEL

Wednesday, 22nd October, 2014

7.00 pm

Publication date: 14 October 2014

CONTACT

If you require further information or you would like a copy of this agenda in another format, e.g. large print, please contact Jodie Kloss/Alan Garside in Democracy and Governance on 01923 278376 or by email to legalanddemocratic@watford.gov.uk .

Welcome to this meeting. We hope you find these notes useful.

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COMMITTEE MEMBERSHIP

Councillor P Taylor (Chair)

Councillor K Hastrick (Vice-Chair)

Councillors S Counter, J Dhindsa, S Greenslade, A Joynes and R Martins

AGENDA

PART A - OPEN TO THE PUBLIC

1. APOLOGIES FOR ABSENCE/ COMMITTEE MEMBERSHIP

2. DISCLOSURES OF INTEREST

3. MINUTES

The minutes of the meeting held on 23 September 2014 to be submitted and signed.

Copies of the minutes of this meeting are usually available seven working days following the meeting.

(All minutes are available on the Council's [website](#).)

4. UPDATE ON ACTIONS (Pages 1 - 8)

The update on actions is attached for the Panel's comments and sign-off of any completed actions.

5. ICT CONTRACT (Pages 9 - 170)

Report of the ICT Client Section Head

6. CONCLUSIONS AND RECOMMENDATIONS

The Panel is asked to consider any conclusions and recommendations arising out of the item on the ICT contract.

7. FEEDBACK ON VISIT TO THE DEPOT

The Panel are asked to discuss any conclusions and learning points from the visit to the depot.

8. WORK PROGRAMME (Pages 171 - 172)

The work programme is attached.

The Panel is asked to note the programme and discuss any changes they would wish to make.

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Outsourced Services Scrutiny Panel: Outstanding Actions and questions

| Action to be carried out | Responsibility | Committee Date | Deadline for completion | Target/comments | |
|---------------------------|--|---|-------------------------|-----------------|--|
| Performance Report | | | | | |
| PR5 | <p>The Performance Report to include exception reporting of the performance of the Veolia contract as well as compliments and complaints.</p> <p>Update – The Panel have also requested an overview of the themes of compliments and complaints be included in the report.</p> | Partnerships and Performance Section Head/ Head of Corporate Strategy and Client Services | 19/11/13 and 13/02/14 | | The Panel will receive their next performance report at the meeting in November. |
| PR6 | The Panel to receive an annual report on the number of green flags achieved. | Partnerships and Performance Section Head | 19/11/13 | | The Panel will receive their next performance report at the meeting in November. |
| PR9 | Data relating to customer satisfaction levels at the Palace Theatre to be added to the performance report. | Partnerships and Performance Section Head | 13/02/14 | | The Panel will receive their next performance report at the meeting in November. |
| PR14 | Details of the cleaning regime at Woodside Leisure Centre to be provided to the Panel, with particular reference to the cleanliness and maintenance of the showers. | Partnerships and Performance Section Head/ Commissioning Manager | 23/09/14 | | Details will be forwarded ahead of the November meeting. |

| Action to be carried out | | Responsibility | Committee Date | Deadline for completion | Target/comments |
|--------------------------|---|--|----------------|-------------------------|--|
| PR15 | The performance report to show how many complaints about the top three areas of complaint had been received. | Partnerships and Performance Section Head/ Commissioning Manager | 23/09/14 | | The Panel will receive their next performance report at the meeting in November. |
| PR16 | Details of the most common reasons why exercise classes were cancelled at the leisure centres to be circulated to the Panel. | Partnerships and Performance Section Head/ Commissioning Manager | 23/09/14 | | This will be included in monitoring information received from the contractor and reported on in Quarter 3. |
| PR17 | In respect of indicators LC5 and LC10, the Panel would like this information benchmarked against Watford's population as a whole. | Partnerships and Performance Section Head/ Commissioning Manager | 23/09/14 | | The Panel will receive their next performance report at the meeting in November. |
| PR18 | The Panel is interested in any data about why the levels of participation by those aged 55+ are low. | Partnerships and Performance Section Head/ Commissioning Manager | 23/09/14 | | This will be included in monitoring information received from the contractor and reported on in Quarter 3. |

| Action to be carried out | | Responsibility | Committee Date | Deadline for completion | Target/comments |
|---------------------------------|---|--|-----------------------|--------------------------------|--|
| PR19 | The Panel would like information about how the membership of the leisure centres had been affected by competition from low-cost gyms. | Partnerships and Performance Section Head/ Commissioning Manager | 23/09/14 | | This will be included in monitoring information received from the contractor and reported on in Quarter 3. |

| Action to be carried out | Responsibility | Committee Date | Deadline for completion | Target/comments |
|--|--|----------------|-------------------------|--|
| PR20 The Panel to be provided with details of the charging structure for the Colosseum. They suggested that the number of dark days could be reduced if community groups were offered these days at lower rates. | Partnerships and Performance Section Head/ Commissioning Manager | 23/09/14 | | <p>The current charging structure will be provided ahead of the November meeting</p> <p>With regard to dark days, HQ Theatres advise that whilst 84 dark days appears to be a high number this actually equates to about 1.5 days a week. They expect to see a higher proportion of dark days in the first and second quarters of the financial year, i.e. the summer period due to there being more outdoor events taking place. Dark days can happen for a variety of reasons including:</p> <ul style="list-style-type: none"> - public holidays - sudden cancellation of a show e.g. due to the artist being unwell - Maintenance - Technical requirements to prepare for an upcoming performance <p>HQ Theatres advise that they are working to minimise the impact of these occasions. A range of community groups already use the venue at a reduced rate and will continue to be encouraged to do so, however for HQ Theatres as a commercial operator this has to be balanced with the need to generate sufficient income for sustainability.</p> |

| Action to be carried out | | Responsibility | Committee Date | Deadline for completion | Target/comments |
|--------------------------|--|--|----------------|-------------------------|--|
| PR21 | Officers to discuss how the performance indicators for Revenues and Benefits should be reported. | Director of Finance/ Partnerships and Performance Section Head | 23/09/14 | | The Panel will receive their next performance report at the meeting in November. |
| PR22 | The Panel to be informed why PR9, satisfaction levels at the Palace Theatre, were being added to the performance report as it was not an outsourced service. | Committee and Scrutiny Support Officer | 23/09/14 | | The minutes of the meeting of OSSP in February 2014 stated: 'Following a discussion about the satisfaction levels in CS15 (related to satisfaction with theatres and concert halls in the 3rd quarter performance report of 2013/14), it was agreed that it would be useful to include satisfaction at Watford Palace Theatre as a comparison.' However, the Theatre is not an outsourced service and so regular reporting would not fall within the remit of the Panel. |

| Action to be carried out | Responsibility | Committee Date | Deadline for completion | Target/comments |
|--------------------------|--|---|-------------------------|---|
| SLM | | | | |
| SLM 10 | Partnerships and Performance Section Head to discuss with the Commissioning Manager the report of demand for further women-only swimming sessions at Central Leisure Centre. | Commissioning Manager/ Partnerships and Performance Section Head | 14/07/14 | SLM have provided usage figures for the women-only swimming session. The maximum capacity of the main pool is 100. The average take up as a % of capacity (taken over a period of 8 months) is around 19.5%. SLM advised that women also use the small pool which has a capacity of 32. Looking at figures over the 8 month period, it would appear that this is where there may be a capacity issue. SLM would like to have further information about what the issues are so they can consider this further. |
| Veolia | | | | |
| VE7 | The Client Manager to provide the Panel with information about the street cleaning regime including how long bags of rubbish can be left before collection and detail of the regime in Woodside and Meriden wards in particular. The concerns were reiterated at the meeting in September 2014. | Client Manager | 23/09/14 | It is suggested that this matter be raised as part of the meeting in November on parks and streets cleansing. |

| Action to be carried out | | Responsibility | Committee Date | Deadline for completion | Target/comments |
|--------------------------|---|--|----------------|-------------------------|---|
| VE9 | Committee and Scrutiny Support Officer to ask the Client Manager whether the Ward councillors were usually invited to the launch event of green flag awards. | Committee and Scrutiny Support Officer | 23/09/14 | | Ward councillors are invited to any launch we have in the relevant park. If there is a national / regional launch the portfolio holder is invited. |
| VE10 | Committee and Scrutiny Support Officer to obtain further information about the time taken to remove fly-tips and the role of Watford Community Housing Trust on their land. | Committee and Scrutiny Support Officer | 23/09/14 | | It is suggested that this matter be raised as part of the meeting in November on parks and streets cleansing. |
| VE11 | Committee and Scrutiny Support Officer to raise the Panel's concerns about the amount of time taken to remove green sacks containing litter. | Committee and Scrutiny Support Officer | 23/09/14 | | It is suggested that this matter be raised as part of the meeting in November on parks and streets cleansing. |
| VE12 | Committee and Scrutiny Support Officer to inform the Panel who was responsible for overgrown hedges on private land blocking alleyways. | Committee and Scrutiny Support Officer | 23/09/14 | | The Transport and Infrastructure Section Head has advised that in these cases Councillors should contact him to determine responsibilities as it is dependent on the ownership of the land. |
| VE13 | Committee and Scrutiny Support Officer to arrange a visit for councillors to the depot. | Committee and Scrutiny Support Officer | 23/09/14 | | This has been arranged for 21 October 2014. |

| Action to be carried out | Responsibility | Committee Date | Deadline for completion | Target/comments |
|------------------------------|---|--|-------------------------|---|
| Revenues and Benefits | | | | |
| RB2 | Head of Revenues and Benefits to arrange a briefing for councillors on council tax collection and recovery. | Head of Revenues and Benefits | 23/09/14 | Briefing to be arranged. |
| RB3 | Head of Revenues and Benefits to circulate information to the Panel about how much the bailiffs charge. | Head of Revenues and Benefits | 23/09/14 | This information has been requested and will be circulated to the Panel when available. |
| Work Programme | | | | |
| WP3 | Committee and Scrutiny Support Officer to add Revenues and Benefits to the panel's work programme in July 2015. | Committee and Scrutiny Support Officer | 23/09/13 | This has been added to the work programme for 2015/16. |

*PART A

Report to: Outsourced Services Scrutiny Panel

Date of meeting: 22 October 2014

Report of: ICT Client Section Head

Title: ICT Outsourced Contract

1.0 SUMMARY

1.1 The internal ICT service outsourced all ICT service provision in May 2013 to Capita. There are currently significant issues with Capita core contract delivery identified by the client team and accepted by Capita.

1.2 This report outlines:

- Why, the decision was taken to outsource the IT Service
- How the contract is “normally” monitored and how it is currently being monitored within the recovery state
- Service Level Agreements, including financial penalties within the contract
- Current Capita resources and structure
- Issues directly affecting Councillors
- Contract finances.

2.0 RECOMMENDATIONS

2.1 Panel to note the background to the outsourcing decision;

Panel to note the areas for improvement required and that Capita has made a commitment at MD level to address them rapidly, even where this requires additional resources at a cost to Capita.

Contact Officer:

For further information on this report please contact:

Emma Tiernan, ICT Client Section Head

telephone extension: 727457 email: emma.tiernan@watford.gov.uk

3.0 Background information

3.1 In May 2011, following a request from the Joint Management Board (JMB), and with the agreement of the Joint Shared Services Committee (JSSC), the Councils procured services to conduct an independent review of the internal shared ICT service. There was clear evidence of a general dissatisfaction with the internal IT service and an inability to keep up with the demand from both Councils. It was identified by the Head of ICT at the time that there was a requirement to invest in the infrastructure, however it was the third party commissioned that was to identify the extent.

The approach used to deliver the review consisted of three stages:

- information gathering;
- analysis
- reporting.

The information-gathering stage involved holding a number of stakeholder meetings with key staff across both Councils, running a number of analysis tools on the ICT infrastructure and reviewing current IT support documentation.

3.1.1 The recommendations from the report covered the following areas (details can be found on pp2-6 of the Executive Summary – Appendix 1):

- (1) The current infrastructure risks and issues
- (2) Governance and management of the ICT shared service
- (3) ICT service delivery
- (4) IS architecture
- (5) Performance management
- (6) Flexible working

3.1.2 It was agreed by the JSSC and the JMB to focus on only some of these recommended areas until the future of the delivery of the shared ICT service had been decided. These were:

- (1) The replacement of the essential/critically failing infrastructure
- (2) The establishment of the ICT Steering Group

This work commenced in September 2011 and finished in May 2012. In parallel with replacing the critically failing server infrastructure, the Councils investigated options to outsource the internal ICT service.

3.1.3 In July 2011 as well as approving the replacement of the essential infrastructure that was failing, JSSC approved the initiation and additional budget requested by Officers for the development of the options appraisal for the potential outsourcing of the IT service.

In November 2011, JSSC approved the recommendation from JMB to progress to soft market testing the outsourcing of the entire IT service.

Other options were considered were:

- Do Nothing
- Internal investment within the existing IT service
- Outsourcing using the existing Hertfordshire County Council framework
- Full IT outsourcing (excluding hardware)
- Multi-sourcing: blend of internal and external service delivery
- Full IT outsourcing, including all assets

The investment within the internal service option was discounted at the time as an increased budget would be required. For full details of the options appraisal, see appendix 2.

In March 2012 following some soft market testing and the completion of the requirements specification for the IT service, JSSC approved officer's recommendation to procure IT services via a dual procurement route.

The procurement routes were via the Hertfordshire County Council framework agreement, of which SERCO was the only supplier at that time, as well as procurement using the GPS (Government Procurement Services) framework, which includes several national suppliers, such as, Capita SIS (CSIS), Northgate and Civica, among others.

- 3.1.4 Actica Consulting was appointed to develop the Councils' requirements specification in consultation with both Councils and the Invitation To Tender was advertised in June 2012.

The invitation to submit bids closed on July 9 2012. Four bids were received and evaluated by a panel consisting of:

- Head of Strategic Finance (Watford)
- Head of ICT Shared Services
- Infrastructure Manager (Shared Services)
- Service Desk Manager (Shared Services)
- ICT Business Manager (Shared Services)
- Corporate Procurement Manager (Watford)
- Finance representative (TRDC/ Shared Services)
- Legal representative (Watford)
- Director Community and Environmental Services (TRDC)
- Head of Service (Watford)
- Service Manager (Watford)
- Director of Corporate Resources and Governance (TRDC)
- Customer Services Manager (TRDC)

The Evaluation Panel was split into 3 groups to undertake the evaluation of tenders and a Moderator Group was also established. Actica Consulting acted as facilitators throughout the evaluation process.

- 3.1.5 In Sept 2012, JSSC approved a report from the Evaluation Panel detailing the evaluation and recommendations of the outsourced bids submitted. It agreed that due diligence should commence with preferred bidder CSIS which was awarded preferred bidder status with Northgate as reserve.

Throughout October and November 2012 pre-contract (sales) due diligence commenced and reference sites were visited. Members should note that Actica also conducted their own due diligence of the process undertaken by both the Councils and CSIS.

- 3.1.6 In Jan 2013 after successfully completing the due diligence processes, CSIS presented to the JSSC areas that their IT Service would improve, specifically:
- The stabilisation of the ICT Service
 - The introduction of Innovation Forums
 - The use of a wide range of Cloud Computing Services
- 3.1.7 Transition activity took place throughout early 2013, with the start of contract date being 1 March 2013. The CSIS IT Service became effective on 20 May 2013.
- 3.1.8 The Councils agreed to retain ownership of all assets, hardware and software licences and no hardware, software or project management costs were included in the transition to Capita. These remain ongoing costs to the Councils.
- 3.1.9 Since outsourcing the service to CSIS, a number of the due diligence issues identified have been addressed either through specific and chargeable projects using existing budgets, or through the managed service contract:
- PSN (Public Services Network) accreditation was achieved late 2013. Due to the large scope of this project, the Councils achieved both the accreditation, and the resolution of other risks and issues. All remedial actions were completed in relation to the IT Health Check in 2013.
 - An asset audit was conducted as part of the transition to Capita
 - PCI (Payment Card Industry) compliance. Aspects of this compliance regime have been met.
 - The link between WBC and TRDC networks was upgraded to an appropriate size pipe.
- 3.10 Approval for additional capital budget to deliver the Modernise IT programme has been approved by Watford Borough and Three Rivers District Councils within 2014.

3.2 Performance – IT Service

- 3.2.1 Watford as the lead provider, under the lead authority model, escalated IT core contract performance issues formally in March 2014. Since then Capita have recognised, accepted and committed to recovering the depleted position of the IT service. This poor service provision is impacting a number of areas of delivery including Modernise IT, outstanding audit recommendations etc.
- 3.2.2 The Council's client team has completed a gap analysis between the commitments in the delivery of the core contract and the reality of users' experience. Capita SIS has undertaken to resolve these issues and the core team have required Capita SIS to provide evidence of the performance of their services to substantiate when the service has reached the desired and contracted

standard.

3.2.3 CSIS' s high level performance is being monitored through strategic account meetings held monthly between Manny Lewis and Spencer Clarkson, CSIS Managing Director. The Cabinet Portfolio holder for Resources is kept fully briefed.

3.2.4 There are 5 core Key Performance Indicators which are:

- Desktop Availability
 - 100% achievement of availability target of 99.5% within Core Hours which are 08:00 – 18:00 Monday to Friday excluding public holidays
- Application Availability
 - 100% achievement of availability target of 99.5% within Core Hours which are 08:00 – 18:00 Monday to Friday excluding public holidays
- Customer Satisfaction:
 - 5.65 on a scale of 1 to 7. Capita will conduct a monthly customer satisfaction survey which surveys 20% of Councils' staff who have used the Help Desk Services during this period.:
- Helpdesk Response Times to high, medium and low priority calls
 - 99% of responses to be met as follows:
 - High priority – 15 minutes
 - Medium Priority – 30 minutes
 - Low Priority – 30 minutes
- Fix / Resolution Times to high, medium and low priority calls
 - 95% of Fixes/Resolutions to be met as follows::
 - High priority – 2 hours
 - Medium Priority – 4 hours
 - Low Priority – 8 hours

3.2.5 If Capita's services fail to meet the requirements of both Councils then the Councils reserve the right to withhold an element of the monthly contract charge for these areas.

- the availability KPI
- the high priority response time KPI
- the customer satisfaction KPI

3.2.6 The Council's core team have been concerned that key performance management information has not been adequately supplied to them with inaccuracies, gaps in the information and some reports not provided at all. This critical area is under close review by the Councils core team and is a key element in the Account Recovery programme.

The reasons for Capita's poor performance include:

- a) Capita did not complete all transition activity successfully;
- b) CSIS under-estimated the scale of legacy under performance of systems and TUPE'd staff and did not act on due diligence sufficiently thoroughly;
- c) CSIS were slow to restructure the inherited staff and is only now putting in place a new permanent team;
- d) the account management and service desk management has not been good enough and both areas have seen changes made as a result;
- e) CSIS have not provided sufficient business applications support needed for our account eg Academy.

In all cases CSIS is now responding. Capita is currently making a loss on the contract. Despite this they are committing additional resources to address the issues.

Capita anticipates a significant level of recovery of the contracted Service by end of 2014 and substantial progress on delivery of infrastructure improvements by 31 March 2015.

3.3 Governance

3.3.1 The following meetings have been taking place to monitor the delivery of the managed service:

- Monthly service review meetings
- Monthly account management
- Fortnightly project board
- Twice weekly change control board
- ITSG (IT Steering Group) meet every 5 weeks (For full terms of reference see appendix 3)
- Regular review meetings with the Portfolio Holder for ICT.

In addition to the more formal arrangements, there have been many informal meetings, including three weekly discussions to look at escalations from users. The Councils' client team track escalations from users, and complaints.

3.3.2 Following the introduction of the "Account Recovery" position, the following additional meetings are taking place:

- Weekly account review meetings
- Twice weekly account recovery project meetings
- Fortnightly account recovery – Updates to Joanne Wagstaffe

3.3.3 The new CSIS Management team consists of the following (as of June 2014):

The Service Delivery Manager:

- Dedicated to the W3R account
- Responsible for the day to day service delivery, including the team,

- processes and
- client management liaison

The Account Director:

- Dedicated to the W3R account
- Responsible for the day to day client contact for all commercial and contractual issues
- Is the escalation point for any service delivery issues
- Acts as the key interface to Programme & Project Managers
- Provides the access to CSIS Senior Management
- Leading Account Recovery day to day work

Local Government Sector Director:

- Support and escalation point for Account Manager
- Overall responsibility for W3R account via Account Manager
- Direct access to CSIS and CAPITA senior management

3.3.4 See appendix 4 for details of the current Capita staffing model for the W3R account. Please note all resources under “Service Delivery Manager” are those contracted on the account. The other resources are project related and are part of the Modernise IT cost.

3.4 Contract Finances

3.4.1 An outstanding contractual issue has been the calculation of the base number of users from March 2013. This figure is key, as it is used to calculate the level indexation applied to the core contract charges.

This figure has now been agreed and the Council will be credited for a reduction in the core contract charge for 2014.

3.4.2 In addition to this there were a number of contracts that Capita should have absorbed as part of the core service delivery and these figures and arrangements are currently being finalised. For example server maintenance costs.

3.4.3 Members should note that the Councils’ client team has initiated a review of all Capita spend since May 2013 and in addition to this Price Waterhouse Cooper will be evaluating all contract costs including the IT Service later this year.

3.5 PSN and Security

3.5.1 Additional security is likely to be the area where Councillors see changes in the way they work. PSN (Public Service Network).

This has been previously known as GSI (or GCSX) and has been in place since 2009. This is a secure and trusted network over which the Councils transfer various pieces of information and data to other trusted public sector organisations e.g. DWP.

This is an annual accreditation requirement and the responsibility lies with the Council for the accreditation, however it is Capita that delivers the work on our behalf.

3.5.2 The most significant change to the way we work is the use of connecting

“unmanaged” end user devices to the Councils’ network. The current policy allows members of staff, and Councillors to use their “home” PC or laptop to connect via Appgate (our home-working solution) to access the Councils network. This is currently under review within the Modernise IT programme.

4.0 **IMPLICATIONS.**

4.1 **Financial**

4.1.1 There are no financial implications within this report.

4.2 **Legal Issues (Monitoring Officer)**

4.2.1 There are no legal implications within this report.

Appendices

Appendix 1

IT Strategy – Actica Consulting

Appendix 2

IT Outsourcing options appraisal document – Actica Consulting

Appendix 3

IT Steering Group Terms of Reference

Appendix 4

Current Capita local structure

IT Strategy for Watford Borough and Three Rivers District Councils

ACTICA/PB308D003 1.1

Keith Thomas

5 May 2011

Executive Summary

Watford Borough Council and Three Rivers District Council are local councils based in South-West Hertfordshire. This document presents the findings and recommendations arising from a review of the provision of Information Technology and Information Systems across both Councils, undertaken by Actica Consulting Ltd. The aim of this review was to identify and recommend a number of tactical improvements to address any immediate issues identified and to propose a set of strategic recommendations to improve the longer term provision of IT services to the Councils.

The approach used to deliver this strategy consisted of three stages: information gathering; analysis and reporting. The information gathering stage involved holding a number of stakeholder meetings with key staff across both Councils, running a number of analysis tools on the ICT infrastructure and reviewing current IT support documentation.

Applications

The information systems that are used by both of the Councils can be split into three categories, namely:

- desktop PCs, with standard desktop applications and network connectivity (including internet access). There is a mixture of thin and thick client used to provide applications on desktop PCs;
- applications which are provided to both Councils as a shared service;
- applications which are hosted centrally and used by an individual Council. These could be supported by the ICT team or one of the Council client services.

The applications used by WBC and the shared service applications are all delivered using thin client technology, which is based at WBC. This means that the applications effectively run on the server rather than the PC and thus transfer the majority of the system resource requirements needed to run the applications back to the server. The applications used by TRDC (non shared services) are delivered using traditional thick client technology. Thick client allows the equipment provided to the users to be tailored to meet their individual computing needs, but at additional expense and complexity.

Currently, the majority of the applications used by both Councils are managed and supported by the ICT team. A small number of applications e.g. Three Rivers Uniform are supported on a day to day basis by staff within the business areas rather than the ICT team. There are plans to continue harmonising applications across the two councils in order to reduce duplication and costs.

Governance

The Councils' combined their IT governance as a result of the shared service initiative in 2009. An ICT service plan focusing on establishing the ICT shared service and a joint ICT network which is aligned to the strategic objectives of both Councils has been in place since the start of shared services. There is a shared services joint committee and a shared services management team which meets fortnightly that is responsible for the delivery of all shared services to both Councils. The lead management responsibility for the ICT shared service is the Executive Director, Resources, Watford Council.

Key decisions on ICT strategy, projects and budget are made by initially by the Shared Management Team and then by the individual Council boards and/or the Joint Committee as needed. However, it is clear that there are numerous demands on the agenda for SSMT and Joint Committee meetings and that the time limitations do not always leave room for clear and detailed discussions on ICT matters such as project

prioritisation. The impact of this is that ICT does not always have clear guidance on priorities, or support in communicating messages to all Council services.

ICT for both Councils is managed by a single Head of ICT who reports to the WBC Executive Director, and manages the IT teams that provide both the shared and the individual applications.

At present, the relationship between TRDC and WBC in regard to ICT services has the appearance of a traditional customer and supplier relationship, although this is was not the intention when the shared services were created. The expectation in TRDC seems to be that the service they should receive from WBC is identical to that which was provided by Steria, albeit at a lower cost.

ICT service provision and performance is regularly discussed with the Heads of Service from both Councils by the Head of ICT. There are plans to formalise arrangements for these meetings and to share the responsibility between the Head of ICT, the ICT business team manager and the ICT infrastructure manager.

Issues identified

A number of issues were identified with both the current infrastructure and management of the ICT services.

The infrastructure issues can be summarised as follows:

- All of the Watford RDP servers (which are used to provide the thin client services) have insufficient memory to meet the current loading on each of the servers. This is causing daily usage issues for most WBC staff;
- The user perception of the Appgate remote access solution used in Watford and Netilla VPN in use at TRDC is very poor. The situation at Watford is likely to be a result of two factors – the configuration of the Appgate application and the thin client service. The thin client service issues described above affect remote users in the same way as local users. The situation at TRDC is likely to be due to the age and lack of support for the Netilla product;
- The backup system hardware is not capable and fails regularly – this has recently resulted in the irretrievable loss of data for the Watford network;
- Air conditioning in the Watford Town hall server room is not stable leading to the requirement of temporary cooling solutions, although it is understood that this situation has not been addressed due to the pending move of the Watford servers to the Apsley data centre.
- All external web traffic from the TRDC domain is routed via the Watford ISP, this is a single point of failure for both networks.

It is also noted that the ICT network is currently performing as needed. The level of network traffic across the network is relatively low and the hardware currently in place is sufficient to manage these levels, with the exception of external web traffic as noted above.

The strategic issues at both organisations can be summarised as follows:

- The current ICT management and governance is not fully effective, particularly around project prioritisation, defining and managing the role of ICT and standardisation;
- Client services tend to make ICT decisions in isolation rather than collaboratively with ICT and other client services;

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- There are disparate IT systems across both Councils leading towards higher cost of ownership and lower integration opportunities. Additionally, business areas define solutions rather than requirements which leads to higher cost and poor support availability;
 - There is a lack of an integrated approach to data and information which reduces efficiency and customer service;
 - There is a lack of guiding architecture design and governance to ensure best fit of new or changes to technology leading to lack of interoperability along with longer lead times to implement;
 - There is a lack of documentation on ICT infrastructure and IT management and support processes;
 - Members of the public are unable to get all the information they require to run their lives effectively via a range of electronic medias;
 - The current ICT systems do not support common working and processes which is a fundamental element of successfully delivering ICT shared services;
 - There is a lack of joined-up ICT procurement approach, leading to lower service levels and ability to deliver and support the objectives of both councils through IT;
 - There is a lack of flexibility in providing ICT solutions that meet the needs of staff, members and the public.

Recommendations

The recommendations made to improve the current provision of ICT to the Watford and Three Rivers Councils are:

Recommendation 1: Address the current infrastructure risks and issues: This will involve taking the following actions:

- Improve the Watford thin client user experience by ensuring sufficient computing resources are available to provide a fast and reliable service to all users, including local and remote. This will involve upgrading or replacing the current Watford RDP servers. This is likely to improve the thin-client experience but may highlight further issues with the infrastructure not currently apparent as the load shifts to other servers, such as application servers;
- Upgrade or replace the other Watford servers noted to be operating near their limits;
- Upgrade the TRDC servers which are currently operating near their limits in order to prevent any related problems or incidents;
- Conduct a full network infrastructure audit and address any issues identified to allow the IT support staff to manage the IT services appropriately, easily and quickly. This is needed to address the current severe lack of documentation and knowledge of the IT infrastructure.
- Improve the system wide monitoring currently in use for both Councils to allow early identification of faults and issues.
- Improve the remote user experience.
- Define and document clear governance processes and procedures for the backup of systems and data.

- Configure the (unused 8Mbit) Easynet ISP connection at TRDC to be used to create a failover internet access point.

Recommendation 2: Governance and management of the ICT shared service: Create an ICT steering group (with responsibilities as defined in Appendix A) and continue to make progress towards delivery of all ICT applications as shared services. This will require the Councils to agree a Terms of Reference for the ICT steering group and its membership, and agree ICT responsibilities across the SSMT, Joint Committee and ICT steering group. The expectation is that the ICT steering group will be chaired by the Head of ICT and report to the Joint Committee or SSMT. One of the first actions of the steering group will be to discuss and agree the roadmap for harmonising ICT systems across both Councils. This will need to take into account current software contracts, hardware limitations, user licences and user training in order to agree migration plans for each duplicated system, and will also be dependent upon IT resource usage and availability.

Recommendation 3: ICT service delivery: Implement ITIL-based process to cover all service delivery activities and in parallel review existing agreed SLA's. This option is likely to deliver a similar service in terms of quality to the outsourcing approach, but will avoid any costs and other difficulties associated with role-guarantees, redundancy and TUPE. It will also ensure that the Council is well placed to take advantage of any of the government ICT initiatives such as G-cloud and the PSN without having to change contracts with a 3rd party.

It is then recommended that the Council review the implementation of this option after up to 24 months to ensure that services have improved in line with expectations. If they have not, an outsourced delivery of ICT services should be considered in order to ensure that requirements are met.

Recommendation 4: IS Architecture: Audit the ICT infrastructure and implement a clear set of technology standards and a unified architecture framework. This includes:

- Consolidation of applications using the same technology: Continue to consolidate the operation of similar services which operate in different divisions to save maintenance and licensing costs, for example SQL databases and web content management;
- Virtualisation of hardware: Continue the use of virtualised servers and cloud computing to reduce hardware requirements;
- Support and guidance: Provide support and guidance, through the formal and informal information sharing mechanisms, relating to the best use of the architecture.

It is also recommended that the Councils review the implementation of this option after up to 24 months to ensure that it is meeting their requirements. If this is not the case, outsourcing of the IS architecture provision should also be considered.

Recommendation 5: Performance management: Medium term the creation of individual SLAs with all client services for all ICT services should be considered. This would mean that specific SLAs suited to the service being provided and the business unit's requirements, e.g. for reliability and support would be discussed regularly with the Heads of Service to ensure quality of service and the provision of future capabilities. These SLAs should be in line with ITIL V3 best practice as this will ensure internal processes are in line with the industry standard. In addition, the current benchmarking activities should continue and the results widely communicated. A review of the existing SLA's agreed through the inception of Shared Services should take place in line with recommendation 3.

Recommendation 6: Flexible working: Adopt enabling technologies and review options to enable applications for remote working. This will ensure that the council continues to provide flexibility for staff, members and the public around the use of IT systems and access to council information.

The table below maps these recommendations against the key issues identified earlier.

| Recommendation | Issues addressed |
|--|---|
| Recommendation 1: Address the current infrastructure risks and issues | <ul style="list-style-type: none"> • The current IT systems do not support common working • Lack of flexibility |
| Recommendation 2: Create an ICT steering group | <ul style="list-style-type: none"> • Lack of time for ICT governance • Client services make decisions in isolation • Disparate IT systems • Lack of IT architecture design and governance • Current systems do not support common working and processes • Lack of joined up ICT procurement |
| Recommendation 3: Implement ITIL based processes | <ul style="list-style-type: none"> • Client services make decisions in isolation • Lack of IT architecture design and governance • Lack of documentation • Lack of joined up ICT procurement • Lack of flexibility |
| Recommendation 4: Implement technology standards and an ICT architecture framework | <ul style="list-style-type: none"> • Disparate IT systems • Lack of integrated approach to data and information • Lack of IT architecture design and governance • Lack of documentation • Customers unable to get information needed • Current systems do not support common working and processes • Lack of flexibility |
| Recommendation 5: Create individual SLAs with Council departments | <ul style="list-style-type: none"> • Client services make decisions in isolation • Disparate IT systems • Lack of integrated approach to data and information • Lack of IT architecture design and governance • Lack of documentation • Current systems do not support common working and processes • Customers unable to get information needed • Lack of joined up ICT procurement • Lack of flexibility |
| Recommendation 6: Adopt additional enabling technologies | <ul style="list-style-type: none"> • Lack of flexibility |

Timeline

It is recommended that the tactical and strategic recommendations are implemented in parallel, beginning as soon as possible. This will ensure that the service to users is improved as quickly as possible, whilst also

ensuring that once the service is improved a framework is in place to continue running the IT services effectively and to make improvements as needed. The time taken to implement these recommendations will also depend on the resources available to IT (i.e. whether a full complement of staff is recruited) and on the relative priority of these recommendations versus existing projects. These priorities will need to be set by the ICT steering group.

Costs

The expected costs of implementing this strategy are listed in Table 6-2 below. These are all based on previous experience of implementing similar projects.

| Capital Costs | Ongoing Costs |
|---|--|
| £5k external support for ICT steering group | £40k for extra ICT resource to develop processes |
| £50k external support for new ICT processes | |
| £10k for updated SLAs | |
| £150k for IS architecture improvements | |
| Totals | |
| £225k over 1 to 2 years | £40k p/a for up to 2 years |

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1 Introduction

1.1 Overview

1.1.1 Watford Borough Council and Three Rivers District Council are local councils based in South-West Hertfordshire. This document presents the findings and recommendations arising from a review of the provision of Information Technology and Information Systems across both Councils, undertaken by Actica Consulting Ltd. The aim of this review was to identify and recommend a number of tactical improvements to address any immediate issues identified and to propose a set of strategic recommendations to improve the longer term provision of IT services to the Councils.

1.2 Definitions

1.2.1 For the purpose of this strategy the following definitions are used:

- a. Information Systems: Information systems (IS) are those systems which are used by users to process and store information and data. These include finance systems, human resources systems, bookings systems, office automation systems and systems processing public data, such as housing and benefits.
- b. Information Technology: Information technology (IT) is defined as the hardware and infrastructure which supports the information systems; this will typically include Desktop PCs, servers, switches, cables and onward connectivity to the Internet, as well as technical support and development.

1.3 Purpose of this strategy

1.3.1 The Councils are both undergoing prolonged periods of change driven by changing public expectations, changes to budgets and funding models and changes to local government strategies across the UK. Additionally Watford and Three Rivers Councils have recently entered a shared services agreement for a number of key functions, including IT, and are continuing to review, understand and manage the implementation of these.

1.3.2 The purpose of this Information Systems and Communications Technology (ICT) strategy is to therefore support the Councils in achieving their strategic objectives through appropriate utilisation of ICT, and to support the short term improvement to IT services through recommending a series of tactical improvements.

1.4 Status

1.4.1 This is the final version of the strategy and risk report.

1.5 Consultants' brief

1.5.1 The aim of this assignment was to review the current ICT infrastructure and services, and make recommendations to mitigate any risks identified and for strategic improvements to the current ICT provision to the Watford and Three Rivers Councils. The scope includes the shared services, the local services and the internal support services.

- 1.5.2 The current service incorporates desktop provision to all Council staff, a range of business applications used by one or more divisions and an analogue voice communications system that is approaching its end of life.
- 1.5.3 The review assessed how well this provision meets the needs of the individual Councils and how ICT can support the requirements of the Councils' ongoing business strategies for the next five years.
- 1.5.4 The scope of the review included four phases:
- a. Phase 1 – Assess the current ICT infrastructure and services to identify immediate risks to service.
 - b. Phase 2 – Assess the current operational, and future strategic needs of the individual client services within both Councils.
 - c. Phase 3 – Assess how the needs are satisfied by the current ICT services provided by the ICT team. Identify any gaps between requirements and provision, and any issues.
 - d. Phase 4 – Present a range of contrasting options for the delivery of ICT. Recommend the optimal solution to support the current and strategic needs for a 5-10 year time horizon. Produce a comprehensive strategy document (this document).

1.6 Approach

- 1.6.1 The approach used to deliver this strategy consisted of three stages: information gathering; analysis and reporting. The information gathering stage involved holding a number of stakeholder meetings with key staff across both Councils, running a number of analysis tools on the ICT infrastructure and reviewing current IT support documentation. Interviews were conducted by Actica consultants. Each interview followed a standard questionnaire in order to gain a consistent and comparable understanding of both the requirements for IT across each division in the Councils' and their overall business objectives for the next five years.
- 1.6.2 Interviews have also been conducted by Actica consultants with the WBC and TRDC Infrastructure manager to understand the existing state of the infrastructure and systems. Visits have been made to each of the WBC and TRDC sites holding server equipment.
- 1.6.3 In order to identify any opportunities for short term improvement, network monitoring has been performed on the relevant different parts of the network to ascertain if the hardware is fit-for-purpose. Documentation of the different networks has also been reviewed where it existed.
- 1.6.4 The analysis stage involved documenting the information gathered at the interviews and from the network monitoring, and reviewing it to identify any key issues and common themes. This information was then used to generate a number of short term, tactical options to address the immediate issues and to generate a set of strategic recommendations to improve the Councils' ICT in line with their overall business strategy.
- 1.6.5 The final reporting stage consisted of delivering a draft version of this strategy document and then updating that to include any comments made on the draft version by Council staff.

1.7 Structure

- 1.7.1 The remainder of this report is structured as follows:
- a. Section 2 details background information to this report;

-
- b. Section 3 summarises the current situation;
 - c. Section 4 lists the risks and issues identified;
 - d. Section 5 discusses the emerging options and proposed recommendations for the IT Strategy;
 - e. Section 6 presents the consolidated IT Strategy for the Councils;
 - f. Appendix A is a draft Terms of Reference for an ICT Steering Group;
 - g. Appendix B is a copy of the questionnaire used for the stakeholder meetings;
 - h. Appendix C details the methods and tools used to identify risks with the current ICT infrastructure;
 - i. Appendix D is a glossary of terms used.

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2 Overview of the Councils

2.1 Background

- 2.1.1 Watford Borough Council (WBC) is the local authority for the Watford non-metropolitan district of England. Watford is located in the south-west of Hertfordshire, in the East of England region.
- 2.1.2 WBC consists of 37 elected members. 36 of them represent the twelve electoral wards of the borough; each of the wards elects three councillors. In addition, the mayor of Watford is one of the directly elected mayors in the United Kingdom.
- 2.1.3 At the time of writing, the Council is currently controlled by the Liberal Democrats, who hold 28, or 76%, of the 37 seats. The Conservatives, Labour, and Green Party each hold 3 seats. One of the Liberal Democrat seats is the elected-mayor, Dorothy Thornhill, a Liberal Democrat.
- 2.1.4 Three Rivers District Council (TRDC) is the local authority for the Three Rivers non-metropolitan district of England. Three Rivers is located in the south-west of Hertfordshire, in the East of England region. TRDC itself is based in Rickmansworth, the largest settlement in the district.
- 2.1.5 The Council consists of 48 elected members, representing twenty electoral wards. The Council is also currently controlled by the Liberal Democrats, who hold 30, or 63%, of the 48 seats.
- 2.1.6 The services provided by both councils include:
- a. Business services; Finance, HR, ICT, Legal and CSC
 - b. Environment, Licensing, Planning and Development Control;
 - c. Community;
 - d. Leisure;
 - e. Revenues and Benefits;
 - f. Housing.
- 2.1.7 The management of both councils' housing stock was recently sold off to community housing trusts, although TRDC maintains responsibility for its garage stock.

2.2 ICT history

- 2.2.1 WBC has always provided its own IT infrastructure and services, growing its ICT capability in line with demand. Its ICT servers are based at Watford Town Hall and the support team, originally also based in the Town Hall is now split between there and the TRDC building, Three Rivers House.
- 2.2.2 TRDC has taken a different approach and has chosen to outsource its ICT requirements over the past ten years to a number of different suppliers. Most recently, the service has been provided by Steria, who took over the contract in 2005.

- 2.2.3 In November 2009, WBC and TRDC established a shared ICT service for both councils to provide a number of common applications. They are currently planning to continue to harmonise the ICT infrastructure and front-line applications in order to realise benefits such as:
- a. reduced costs;
 - b. improved performance;
 - c. increased resilience.
- 2.2.4 This shared service is fully in-house following the end of the TRDC contract with Steria in March 2010. It is based at TRDC under a single Head of Service, and provides the following services:
- a. operating a single helpdesk;
 - b. implementing new IT projects including business process re-engineering;
 - c. providing application administration, web development and IT implementations;
 - d. managing the separate network infrastructures of each council.
- 2.2.5 The ICT shared service currently provides 36 applications to both Councils.
- 2.2.6 The next step in this process is to create a single network infrastructure for WBC and TRDC. WBC and TRDC have agreed a model for the creation of this network.

2.3 Corporate plans

- 2.3.1 Both councils have published corporate plans covering the next three to four years. These plans focus on the delivery of services to the public, the green agenda, safety and the environment. The plans also maintain that the successful delivery of these strategic objectives is underpinned by council governance, the effective and efficient management of resources and by forming effective partnerships with other public sector organisations. The specific objectives of both councils are listed below.

Watford Borough Council

- 2.3.2 Watford Council's stated objectives are:
- a. Improve the health of the town and enhance its heritage;
 - b. Enhance the town's 'clean and green' environment;
 - c. Enhance the town's sustainability;
 - d. Enhance the town's economic prosperity and potential;
 - e. Supporting individuals and the community;
 - f. Securing an efficient, effective, value for money council;
 - g. Influence and partnership delivery.

Three Rivers District Council

- 2.3.3 Three Rivers stated objectives are:
- a. We will work with partners to make the district a safer place;
 - b. We will provide a safe and healthy environment;

-
- c. We want to provide equal access to services and facilities for the public within the district and surrounding area and in particular address the needs of vulnerable residents such as elderly, disabled and young people;
 - d. We want to maintain a high quality local environment and reduce the eco-footprint of the district;
 - e. Customers – We will deliver our services to a standard that meet the needs and expectations of all of our customers;
 - f. Governance – We will manage our resources to deliver our strategic priorities and service needs.

2.3.4 ICT clearly plays a large part in the successful delivery of these objectives as it underpins both the efficient management of internal services and resources, and directly enables a number of the requirements needed to meet the external objectives.

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3 Current Situation

3.1 Purpose of this section

3.1.1 In this section, the information which emerged from the Stakeholder interviews with senior staff and workshops with staff is presented and analysed to identify the key issues and common themes regarding the ICT systems in use and supported today.

3.2 Information Systems

3.2.1 Information systems overview

Applications

3.2.1.1 The information systems that are used by both of the Councils can be split into three categories, namely:

- a. desktop PCs, with standard desktop applications and network connectivity (including internet access). There is a mixture of thin and thick client used to provide applications on desktop PCs;
- b. applications which are provided to both Councils as a shared service;
- c. applications which are hosted centrally and used by an individual Council. These could be supported by the ICT team or one of the Council client services.

3.2.1.2 The business applications in use by WBC are identified as:

- a. AKS e-Genda committee application;
- b. Anite document management system;
- c. APLAWS content management system;
- d. BACS electronic money transfer;
- e. AtriumProperty asset management;
- f. Ebase Eforms online forms;
- g. Weberos and Halarose elections and electoral roll systems;;
- h. JAAMA fleet management system;
- i. Lagan CRM systems;
- j. Limehouse planning application;
- k. Macfarlane telephony system;
- l. OMS legal costing system;
- m. Radius cash receipting system;
- n. Snap questionnaire application;

- o. Gauge job evaluation application.

3.2.1.3 The business applications in use by TRDC are identified as:

- a. Albany BACS electronic money transfer;
- b. Capita housing for garage management;
- c. Capita REMIT income management;
- d. Express elections and electoral role system;
- e. EShopworks content management;
- f. Proactive CRM system;
- g. M3 EHL environmental health;
- h. Solcase legal system.
- i. Bartec Waste Management

3.2.1.4 The business applications in use by both Councils are:

- a. ESRI GIS system;
- b. Public Access planning application;
- c. Site Improve website tool;
- d. Total Land Charges system;
- e. Uniform environmental, planning and building control system;
- f. OAK call management system;
- g. Modern.Gov E-Petitions.

3.2.1.5 The business applications provided as a shared service are:

- a. Capita Academy Revenues and Benefits;
- b. Cedar COA finance;
- c. In-Case fraud system;
- d. NorthgateArinso Payroll;
- e. ResourceLink;
- f. Touchpaper ICT helpdesk application.

3.2.1.6 There are also a small number of business applications in use that the Councils plan to decommission in the future. These are:

- a. Aptos – Finance system;
- b. Powersolve – Finance system;
- c. Civica – Revenues and Benefits system;
- d. CHRIS – HR system.

3.2.1.7 A number of these applications could be considered as business-critical in that the operation of the Councils would be seriously impacted if they were not available. These include the

Revenues & Benefits and Finance systems as they handle the Councils' financial records and transactions.

- 3.2.1.8 The majority of the applications are Windows-based, with a number running on UNIX at Three Rivers.
- 3.2.1.9 The applications used by WBC and the shared service applications are all delivered using thin client technology, which is based at WBC. This means that the applications effectively run on the server rather than the PC and thus transfer the majority of the system resource requirements needed to run the applications back to the server. This allows the desktop PCs to be a lower specification (and hence extends the hardware refresh cycle) and makes application support and maintenance easier as the applications are all installed in one place. However, it does require the servers and network to be of sufficiently high specification to deliver the applications successfully and effectively. As the number of users grows, the server capacity must be increased to handle the additional workload. Over loaded servers or a poorly performing network will result in users experiencing delays and sluggish response. If taken to the extreme users would not be able to log on to their accounts. Maintaining sufficient network and server capacity is critical to thin client architectures.
- 3.2.1.10 The applications used by TRDC (non shared services) are delivered using traditional thick client technology. Thick client allows the equipment provided to the users to be tailored to meet their individual computing needs. More powerful equipment can be provided to power users in terms of either graphics processing or number crunching. This flexibility increases the complexity associated with managing the IT assets and software builds. The increased complexity in the IT real estate requires additional staff and funding.
- 3.2.1.11 Currently, the majority of the applications used by both Councils are managed and supported by the ICT team. A small number of applications e.g. Three Rivers Uniform are supported on a day to day basis by staff within the business areas rather than the ICT team. ICT provide regular additional support when required. There are also some applications hosted by external suppliers e.g. Atrium Property Asset Management, E-Petitions.
- 3.2.1.12 There are plans to harmonise applications across the two councils in order to reduce duplication. A roadmap for this is currently being produced as part of the ICT service plan.

Data

- 3.2.1.13 The information types that the Councils use can be broadly described in two categories, business enabling data and public data. The business enabling data is all the data which supports the function of the business of the Councils and includes finance, payroll, HR, certain websites and payment systems. The public data is the data which is held about members of the public, businesses or property and is needed to ensure that the Councils can provide their services. All data held needs to be handled in accordance with current legislation such as the personal data with regard to the Data Protection Act 1998, and the Councils are also Public Authorities for the purposes of the Freedom of Information Act 2000.
- 3.2.1.14 The Councils use a number of systems which hold personal data, including the Human Resources system (Staff data) and the CRM system (customer data), however at present each of these systems hold copies of the database of users, and there is no single authoritative source for data on either Council staff or the public.

3.3 Information Technology

3.3.1 Information Technology overview

3.3.1.1 Information Technology consists of the infrastructure that is used to support the provision of applications. This traditionally consists of desktop, server and network hardware, the operating systems that run those devices and the cabling / connections between them.

3.3.1.2 The main Ethernet network used by the Councils’ connects Watford Town Hall, Three Rivers House, Apsley and a number of other Council buildings. The network currently has sufficient bandwidth and performance to meet user requirements and can support Quality of Service (QoS).

3.3.1.3 The external network (WAN) includes a mixture of physical and wireless links as described in Figure 3.1 below.

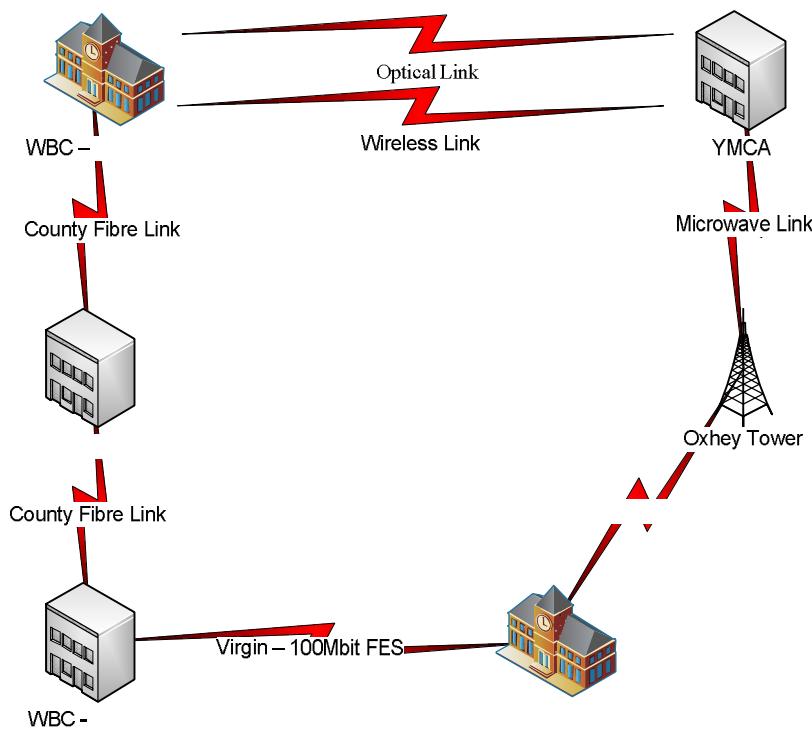


Figure 3.1: WBC and TRDC WAN connections

3.3.1.4 Provision is also made for wireless access to the network at a number of places in the Council building at Three Rivers.

3.3.1.5 There are three server rooms used by the Councils: dedicated rooms are in place at Watford Town Hall and Three Rivers House, and the Council makes use of the 3rd party data centre in Apsley for a number of the test servers and servers within the DMZ, until the Watford server room is relocated.

3.3.2 Servers

3.3.2.1 The Councils have approximately 150 servers in total, housed across the three server rooms. They are primarily small Windows-based servers which are either mid-cycle or reaching end of life.

3.3.2.2 Currently, the majority of WBC business application servers are provided and supported on the basis of dedicated servers per application.

3.3.2.3 The majority of TRDC business application are provided on single servers, with multiple applications per server.

3.3.3 Desktops

3.3.3.1 The Council mainly uses desktop PCs rather than laptops. There is no set or documented hardware refresh cycle for these, however the average age at replacement is approximately four years. There is a budget set aside for desktop hardware replacement, but it is not currently used and there are no clear plans to do so.

3.3.3.2 The provision of IT is underpinned by some generic Service Level Agreements (SLAs) for shared services and desktop services. The aim of these is to ensure that all client services and users get the same level of service for Desktop, and appropriate service levels for business applications.

3.4 Network configuration

3.4.1 AD structure

3.4.1.1 WBC and TRDC each have their own Active Directory (AD) Domains as well as new domains in the merged network. Work has started already to migrate WBC users and servers to the new domain. When this process is complete TRDC users and servers will be migrated in 2011. Figure 3.2 shows a summary of the AD domain design. Arrows denote the direction of trust between the different domains.

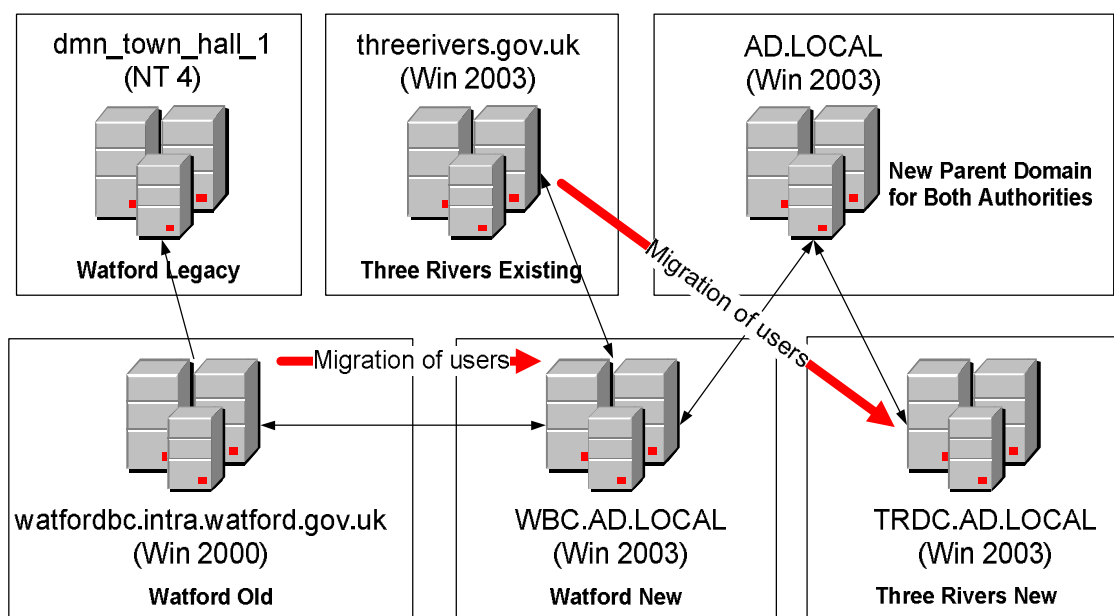


Figure 3.2: AD design for WBC and TRDC

3.4.2 Client Architectures

3.4.2.1 The desktop service used by each council prior to the creation of the shared services is different. Watford primarily provides desktop services using thin client architecture whilst Three Rivers utilize thick client.

WBC Thin Client Architecture

3.4.2.2 The Thin client architecture utilised by WBC provides the advantages of centralized management, commonality across desktops, ease of administration, remote access and reduced TCO. These advantages are offset against the need to provide high performance resilient servers and a network capable of supporting the required capacity. As the number of users grows, the server capacity must be increased to handle the additional workload. Over loaded servers or a poorly performing network will result in users experiencing delays and sluggish response. If taken to the extreme users would not be able to log on to their accounts. Maintaining sufficient network and server capacity is critical to thin client architectures.

TRDC Thick Client Architecture

3.4.2.3 The Thick client architecture used by TRDC allows the equipment provided to the users to be tailored to meet their individual computing needs. More powerful equipment can be provided to power users in terms of either graphics processing or number crunching. This flexibility increases the complexity associated with managing the IT assets and software builds, and also requires additional staff and funding, making the Total Cost of Ownership (TCO) of thick client solutions generally higher than thin-client.

3.4.3 WAN sites and connectivity

WBC

3.4.3.1 All WBC clients are situated at the Watford Town Hall premises. Servers are currently hosted at both Watford Town Hall and Apsley data centre (a data centre owned by Hertfordshire County Council). These servers host services on both the watfordbc.intra.watford.gov.uk (WATFORDBC) domain and the WBC.AD.LOCAL (WBC) domain. The intention is to move all servers currently in the Watford Town Hall server room over to Apsley as soon as a full DR Test has been completed.

TRDC

3.4.3.2 The primary TRDC network (servers and firewalls) is sited at Three Rivers House in Rickmansworth. A secondary Domain Controller (DC) is situated at the South Oxhey site. South Oxhey and Batchworth Depot are both remote sites which predominantly host clients. All these hosts and clients are on the threerivers.gov.uk (TRDCDOM1) domain

3.4.3.3 Shared services systems are hosted at the Watford Town Hall premises – Finance, Revs and Bens and Touchpaper (ICT) systems.

WAN connections and broadcasts

3.4.3.4 The different WBC and TRDC sites are connected using a variety of different methods (as shown in figure 3.1):

- a. Hertfordshire County Council Fibre network;
- b. Leased Line Fibre Links provided by Virgin;

- c. 28 GHz Microwave links;
- d. Secure Wireless links;
- e. Optical (Infra-Red) links.

3.4.4 LAN separation and connectivity

3.4.4.1 Each different domain has its own subnet and IP address range. These are broadcast between the different sites, and connection is possible to all TRDC services from WBC sites and vice versa. Firewalls are configured at each of the sites to allow these broadcasts. Figure 3.3 summarises where the different LANs are situated and how they are separated.

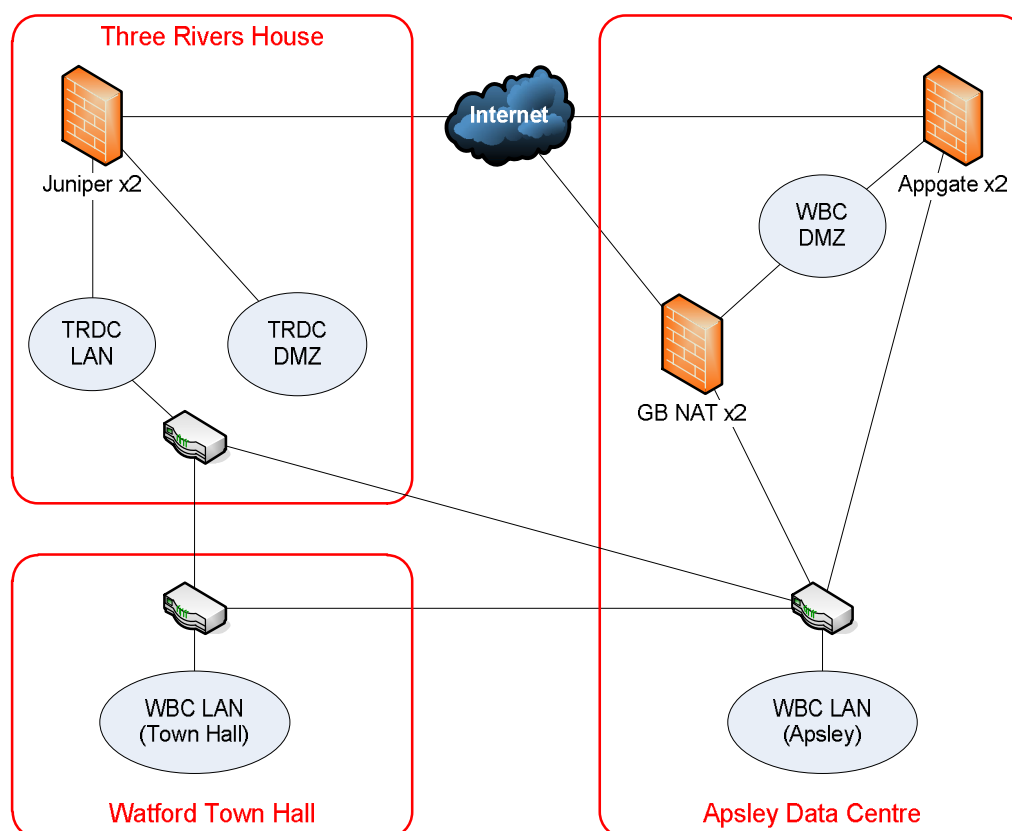


Figure 3.3: Basic interconnections between TRDC and WBC networks

3.5 Governance and Service Provision

3.5.1 Governance

- 3.5.1.1 The Councils' combined their IT governance as a result of the shared service initiative in 2009. An ICT strategy exists in the form of the ICT Service Plan. This is aligned to the strategic objectives of both Councils and is a detailed strategy that shows the costs and risks associated with the provision of ICT and details the projects and other improvements to be made over the strategy period.
- 3.5.1.2 ICT for both Councils is managed by a single Head of ICT who reports to the WBC Executive Director, and manages the IT teams that provide both the shared and the individual applications.

3.5.1.3 The ICT structure changed in Jan 2011 such that the Head of ICT has three direct reports, an Infrastructure manager, a Service Desk manager and a Business manager. The Infrastructure manager is responsible for the day to day running and management of the ICT services provided to both Councils and to the public. The Service Desk manager is responsible for dealing with queries and problems reported by users, and for directing problems to the appropriate teams as needed. Previously the service desk role was the responsibility of the IT/Contracts Manager, with a high level of support required from the Business Team. The ICT Business manager is responsible for maintaining business systems and relationships between ICT and the Council client services, as well as for the delivery of ICT projects.

3.5.1.4 Figure 3.4 below shows the new ICT structure:

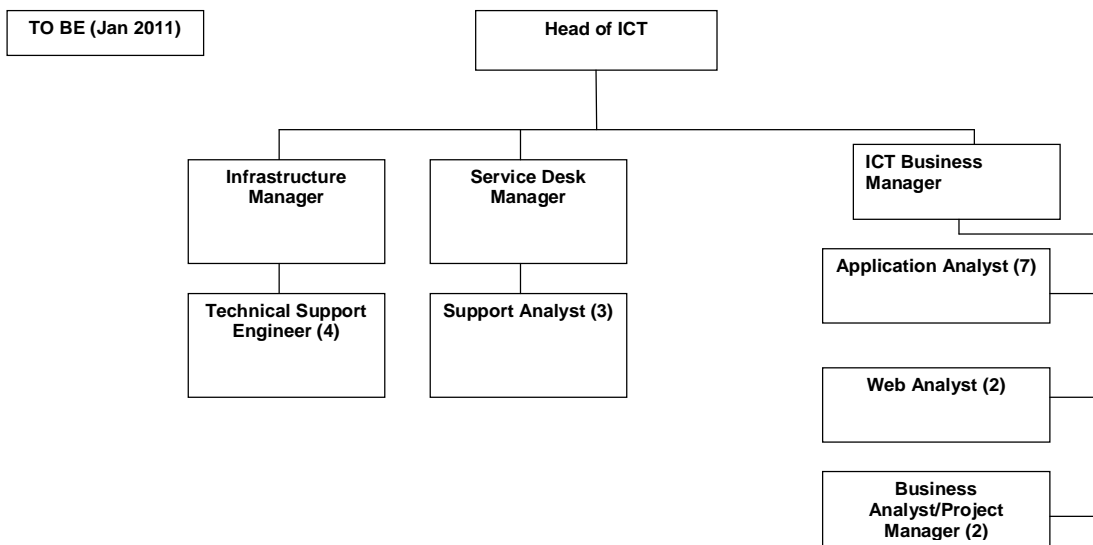


Figure 3.4: New ICT team structure

3.5.1.5 A client manager role was also in the original business case for the shared services. This would have placed two client managers – one at each Council – with responsibility for liaising with the business at all levels, setting expectations, advising the shared services on priorities and requirements from the client authorities. This would then have enabled the ICT service to make plans to provide the best possible support to the business. This role was deleted before implementation due to budget issues, with the responsibilities of the role absorbed by the s151 officers at each council.

3.5.1.6 Additionally, there is a shared services joint committee that is responsible for the delivery of all shared services to both Councils. The responsibility for the delivery of the ICT shared service is allocated to one of the WBC Directors.

3.5.1.7 Key decisions on ICT strategy, projects and budget are made by initially by the individual Council boards, and then by the Shared Services Management Team (SSMT) and/or the Joint Committee as needed. However, it is clear that there are numerous demands on the agenda for SSMT and Joint Committee meetings and that the time limitations do not always leave room for clear and detailed discussions on ICT matters such as project prioritisation. The impact of this is

that ICT does not always have clear guidance on priorities, or support in communicating messages to all Council services.

- 3.5.1.8 At present, the relationship between TRDC and WBC in regard to ICT services has the appearance of a traditional customer and supplier relationship, although this is was the intention when the shared services were created. The expectation in TRDC seems to be that the service they should receive from WBC is identical to that which was provided by Steria, albeit at a lower cost.

3.5.2 Service Provision

- 3.5.2.1 The ICT service is provided to both Councils by the ICT team that reports to the WBC Directors. This team is based in Three Rivers House and has recently been restructured to include three teams – the infrastructure team, the service desk and the business team.

- 3.5.2.2 ICT service provision and performance is regularly discussed with the Heads of Service from both Councils by the Head of ICT. There are plans to formalise arrangements for these meetings and to share the responsibility between the Head of ICT, the ICT business team manager and the ICT infrastructure manager.

- 3.5.2.3 The Head of ICT reports to Leadership Team, Corporate Resource and Governance group, Shared Services Management Team, Joint Committee and on occasion TRDC Management Board.

Infrastructure team

- 3.5.2.4 The infrastructure team is responsible for providing second and third line support for all Council ICT hardware and the majority of application systems. They are also responsible for implementing changes and all ongoing maintenance of the infrastructure. There are five staff in the infrastructure team, including the infrastructure manager.

- 3.5.2.5 The team has a rota to ensure that staff spend roughly equal amounts of time in both Watford Town Hall and Three Rivers House to gain physical access to the hardware as needed. They travel to Apsley when required to access the hardware there.

- 3.5.2.6 Team members in Three Rivers House also take service desk calls from users when required, to ensure that an acceptable service is provided. This can take up much of their time, particularly when there is an ongoing problem or incident.

Service desk

- 3.5.2.7 The service desk was only formed in Jan 2011 and is still in its infancy.

- 3.5.2.8 There is currently one service desk manager and three agents to handle first and second line support to all users across both Councils. These resources are added to through the ICT staff as needed, dependant on call volumes. This happens frequently, particularly when any service desk agents are away on holiday or sick.

- 3.5.2.9 The aim of the service desk is to log calls from users to do with ICT problems, and either to fix them (in the case of simpler queries such as password resets) or to pass them on to the appropriate staff within the infrastructure or business teams to progress with the problem and find a fix.

Business team

- 3.5.2.10 The business team is responsible for maintaining and developing the business applications that are supported by ICT, relationships with the Councils' business areas and for managing ICT projects, or the ICT element of other projects.
- 3.5.2.11 The business team work with the Council heads of service and business areas as needed for projects, the function tends to react to business demand rather than be proactive with ICT opportunities to drive business change.
- 3.5.2.12 Members of the business team also have to take on some service desk responsibilities when required, which impacts resources.
- 3.5.2.13 There are 12 staff in the ICT business team, including the ICT business manager.

Tools and processes

- 3.5.2.14 The tools used by the ICT team include:
- a. service desk software to manage calls from users;
 - b. remote access software to manage servers remotely;
 - c. office automation tools as needed, such as Word, Excel and Powerpoint.
- 3.5.2.15 A number of the ICT team members have received ITIL foundation training, and there are plans to provide further ITIL training to ensure that the ICT team has sufficient knowledge to implement and manage ITIL-based service delivery processes.
- 3.5.2.16 There are a small number of ICT service delivery processes currently in place, however there are plans to develop these processes through business process re-engineering following the completion of the ITIL training, and to roll these out to ICT staff via a number of workshops and change management sessions.

3.6 Security and information assurance

- 3.6.1 Security was not a key theme identified by the Stakeholders, who appear mostly concerned with being able to do 'business as usual'. However, the Councils have obligations under legislation such as the Data Protection Act 1998 to ensure that personal data is not compromised, for example from the finance, human resources or other administration systems.
- 3.6.2 The Council uses Windows Active Directory to authenticate all users to the desktop PC system and further systems use additional logins normally in the form of a username and password to access additional services. There is a desire for a move towards a single sign-on solution based on the Windows Active Directory credential.
- 3.6.3 At present the standard desktop PC provides users with a basic user account – whereby they cannot install software or modify the system or its settings. Administration can be done remotely by the service desk; however, certain categories of users felt that being only a normal user was restrictive to their business as usual. The account type can be changed in light of a business need, via a call to the help desk. It is noted that security best practice is that users should be enabled, by default, as normal users without administration privileges.

3.7 Costs

3.7.1 The current cost for delivering ICT services to Watford and Three Rivers Councils are as follows:

- a. Operating costs (revenue) are approximately £1.5m p/a. This is split approximately 60/40 between Watford and Three Rivers respectively. This has been reduced from approximately £1.8m from 2010/11 due to the in-sourcing of the Three Rivers IT service from Steria. The major portion of this cost (circa £1.1m) is for employees;
- b. There is a capital investment of £190K in 2010 to fund the new SAN implementation, of £30K p/a for hardware replacement for the shared services and £70k p/a for hardware replacement for WBC. A budget for hardware replacement for TRDC has been requested for 2011/12 onwards.

4 Risks and Issues identified

4.1 Purpose of this section

4.1.1 This section presents the risks to current service provision and the strategic issues identified during the information gathering stage. The methods and tools used to identify the risks to the current ICT infrastructure are detailed in Appendix C.

4.2 Current infrastructure risks and issues

4.2.1 Potential system risks

4.2.1.1 The infrastructure monitoring focussed on looking for a number of common problems with ICT infrastructure in both Councils. These were:

- a. High CPU Utilisation - Prolonged high CPU usage will leave little capacity on the server to handle the multitude of competing tasks running on a modern system. This will result in an overall sluggish response for all applications and the inability to run further applications on a server. High CPU load for a prolonged period of time will also shorten the lifetime of the hardware.
- b. Excessive Paging - The physical memory (RAM) installed on a system is a fixed resource. As the system is asked to do more it will supplement the RAM by utilise space on the HDD, this space is the Pagefile. As access to information on a HDD is many times slower than from RAM the CPU will spend time waiting for memory to be swapped between RAM and the HDD. A bottleneck of waiting processes will form as the CPU waits for the much slower memory to be read in/out of the Pagefile. As a result the

CPU load may not be high. The use of the Pagefile and the number of Page/Sec copied to and from the HDD are indicators of how much paging is occurring on a system. If insufficient RAM is made available to meet the needs of the system then the system will become increasingly unresponsive as it waits for the pages of memory to be read from the HDD. A balance must be struck between the memory provided installed in a system and the amount of work that system is expected to do.

- c. Low Disk Space - The amount of free HDD space on any system is likely to decrease over time as more applications or data is added. This gradual change needs to be monitored to ensure that additional HDD space can be added or data removed before the HDD is full. Additional consideration needs to be given to the more dynamic users of disk space. Automated batch jobs may stall if there is insufficient room to write temporary files or logs. If the disk space on a computer becomes low or runs out this may cause the server to hang or even to crash.
- d. High Network Usage - Saturation of the network card with traffic will cause a system to run slowly and user experience will also be debilitated. Automated backup processes often require the highest amount of network capacity; these must be managed and performed outside of peak user hours.
- e. Poor Response Times - The time taken for a ping packet to make the roundtrip between a device and another. If a device is displaying a high response time it may indicate that it is overloaded, there is a problem in the network path or alternatively it has attributed a lower priority to ping packets. A high response time is indicative of network congestion and often occurs at aggregating switches.

4.2.2 Monitoring and analysis results

Classification

- 4.2.2.1 The data collected by the network monitoring tool was analysed and servers have been grouped into different categories (Red, Amber and Green) for four of the sensors recorded. Table 4.1 below defines these categories.

| | Sensor Type | | | |
|-------|-----------------|---------------------|----------------|------------|
| | CPU Utilization | Memory Availability | Pagefile Usage | Disk Space |
| Red | > 90 % | 0 – 5 % | > 15 % | 0 – 15 % |
| Amber | 50 -90 % | 5 – 10 % | 7.5 – 15 % | 15 – 30 % |
| Green | < 50 % | > 10 % | < 7.5 % | > 30 |

Table 4.1: Classification for different sensors

- 4.2.2.2 Where activity on an individual server was identified as being either Amber or Red, this was noted as an issue that may need to be addressed.
- 4.2.2.3 Network traffic for all systems was well below the capacity of the network adapters, and was not deemed to be a risk for the servers. Peaks were observed during backup periods, no out of the ordinary activity was observed.
- 4.2.2.4 Servers that appear in more than one risk category are listed in bold.

TRDCDOM1 Domain

4.2.2.5 **CPU Utilization:** Table 4.2 lists the servers in the red and amber risk categories for available memory.

| Risk Category | Red | Amber |
|---------------|------|------------|
| Server name | None | trdcldgc02 |

Table 4.2: TRDCDOM1 CPU risks

4.2.2.6 **Memory Available:** Table 4.3 lists the servers in the red and amber risk categories for available memory.

| Risk Category | Red | Amber |
|---------------|------|--|
| Server name | None | ex01, trdcldga12, trdcldga7, trdcldgdc02, trdcldgios02 |

Table 4.3: TRDCDOM1 Memory risks

4.2.2.7 **Pagefile Usage:** Table 4.4 lists the servers in the red and amber risk categories for Pagefile usage. The average is given in brackets.

| Risk Category | Red | Amber |
|---------------|--|---|
| Server name | trdcldga10 (49%), trdcldgdc01 (19%), trdcldgdc02 (36%), trdcldgis02 (55%), trproxy (41%) | Ex01 (14%), trdcldga14 (8%), trdcldga7 (8%) |

Table 4.4: TRDCDOM1 Pagefile Usage risks

4.2.2.8 **Disk Space:** Table 4.5 lists the servers in the red and amber risk categories for the combined disk space on each server.

| Risk Category | Red | Amber |
|---------------|----------------------|------------------------------------|
| Server name | trdcldgras1, trproxy | trdcldga10, trdcldga7, trdcldgdc01 |

Table 4.5: TRDCDOM1 Disk space risks

WATFORDBC Domain

4.2.2.9 **Memory Available:** Table 4.6 lists the servers in the red and amber risk categories for available memory.

| Risk Category | Red | Amber |
|---------------|-----------------------|--|
| Server name | PECUNIA, TOULVDB01730 | EROLVAP02804, frolvcn01717, TLCTEAP01725 |

Table 4.6: WATFORDBC Memory risks

4.2.2.10 **Pagefile Usage:** Table 4.7 lists the servers in the red and amber risk categories for Pagefile usage. The average is given in brackets.

| Risk Category | Red | Amber |
|---------------|-----|-------|
|---------------|-----|-------|

| | | |
|--------------------|--|----------------|
| Server name | gislvap01737 (1%), INFLVFS01712 (30%), TLCTEAP01725 (23%), TOULVDB01730 (79%) | wbc02281 (10%) |
|--------------------|--|----------------|

Table 4.7: WATFORDBC Pagefile Usage risks

4.2.2.11 **CPU Utilization:** Table 4.8 lists the servers in the red and amber risk categories for available memory.

| Risk Category | Red | Amber |
|--------------------|------|--|
| Server name | None | ANILVSS02850, ANILVSS02850, CIVLVDB01727, INFLVFS01712 , nightflight, TOULVDB01730 |

Table 4.8: WATFORDBC CPU risks

4.2.2.12 **Disk Space:** Table 4.9 lists the servers in the red and amber risk categories for the combined disk space on each server.

| Risk Category | Red | Amber |
|--------------------|--|--|
| Server name | frolvcn01717 , frolvcn01718, FROLVAP01720 | capsdb, frotedb02076, frotnap02073, idox, nightflight, sterculias, CIVLVDB01727, INFLVFS01712 |

Table 4.9: WATFORDBC Disk space risks

WBC Domain

4.2.2.13 **Memory Available:** Table 4.10 lists the servers in the red and amber risk categories for available memory.

| Risk Category | Red | Amber |
|--------------------|-----------------|--|
| Server name | EXCLUS01 | rdp01, rdp02, rdp04, rdp06, rdp07 |

Table 4.10: WBC Memory risks

4.2.2.14 **Pagefile Usage:** Table 4.11 lists the servers in the red and amber risk categories for Pagefile usage. The average is given in brackets.

| Risk Category | Red | Amber |
|--------------------|---|-------|
| Server name | EXCLUS01 (6%), rdp01 (9%), rdp02 (10%), rdp04 (14%), rdp05 (13%), rdp06 (9%), rdp07 (10%) | None |

Table 4.11: WBC Pagefile Usage risks

4.2.2.15 **CPU Utilization:** Table 4.12 lists the servers in the red and amber risk categories for available memory.

| Risk Category | Red | Amber |
|---------------|-------------|-------|
| Server name | ACADWBCLIVE | None |

Table 4.12: WBC CPU risks

4.2.2.16 **Disk Space:** Table 4.13 lists the servers in the red and amber risk categories for disk space.

| Risk Category | Red | Amber |
|---------------|----------|----------|
| Server name | touchapp | touchweb |

Table 4.13: WBC Disk space risks

4.2.3 Summary of current ICT infrastructure issues

4.2.3.1 121 servers were monitored in a number of batches over a period of weeks to assess their current loading. The loading on servers varied considerably, and there are a number at or approaching the limits of their capacity. There are 15 servers noted that should be replaced or upgraded in the near future in order to prevent further issues occurring. These include all servers in bold above.

Three Rivers District Council

4.2.3.2 A total of 27 servers at TRDC were analyzed, of these:

- a. 1 has high CPU usage,
- b. 5 were low on memory;
- c. 5 were low on disk space;
- d. 8 exhibited excessive paging.

4.2.3.3 This suggests that, although performance seems to be meeting users' requirements at the moment, there may be problems in the near future if usage of the servers increases due to changes in demand (increase in users or data, changes to applications etc.)

Watford

4.2.3.4 The batch of WBC servers consisted of a total of 94 servers and includes the servers for the thin client. Of these:

- a. 7 exhibit high CPU usage;
- b. 11 were low on memory;
- c. 13 were low on disk space;
- d. 12 exhibited excessive paging.

4.2.3.5 This suggests that the RDP (thin client) servers are experiencing particular issues and that a number of other servers also have resource issues. It is possible that resolving the issues on the RDP servers will address the current poor user experience, however it is also possible that

resolving this will only move the performance bottleneck to a different batch of servers. This will need to be reviewed as part of any planned improvements.

Thin Client Servers

- 4.2.3.6 All of the Watford RDP servers (which are used to provide the thin client services) are paging excessively. This is due to insufficient memory to meet the current loading on each of the servers. As the number of users logged in to each server increases the server are forced to use disk space in lieu of memory, this is termed paging. Paging is a normal on all systems but when it is used excessively the responsiveness of the server will suffer. On initial investigation this problem was identified and the IT department installed additional memory. Unfortunately the currently installed operating system is unable to make use of the increased memory.

Remote Access

- 4.2.3.7 The user perception of the Appgate remote access solution used in Watford is very poor. This is likely to be a result of two factors – the configuration of the Appgate application and the thin client service. The thin client service issues described above affect remote users in the same way as local users. In addition, it is possible that the Appgate software is configured to download a large amount of data to remote hosts (i.e. users laptops) when a connection is made, and before the service can be used. This should be reviewed further.
- 4.2.3.8 It is understood that TRDC users have also noted that Nutilla remote access solution is poor, and that a number of those users have moved over to the Appgate solution. Those users are happy with the Appgate solution, which suggests that the problem noted by Watford users may be mainly due to the thin-client server issues.
- 4.2.3.9 For those utilizing the remote facilities outside of the core working hours a better experience should be had. Unfortunately due to the large volume of backup and replication traffic which flow across the network during the evening hours, the user experience is further blighted. User experience may be improved if the hours of large network traffic are notified to the users and if the backup and replication traffic can be delayed to later in the evening or routed through a different segment of the network infrastructure.

Network

- 4.2.3.10 Overall the network traffic on each site and between sites is low. The affect of burst traffic is difficult to assess without further analysis. There are 2 switches which have a poor response time and a number of ports which are recording high numbers of errors. The ICT team is aware of these issues.

Other issues identified

- 4.2.3.11 A number of other risks outside the ICT infrastructure have also been identified as a result of the information analysis. These are:
- a. The backup system hardware is not capable and fails regularly – this has recently resulted in the irretrievable loss of data for the Watford network;
 - b. Air conditioning in the Watford Town hall server room is not stable leading to the requirement of temporary cooling solutions;
 - c. All external web traffic from the TRDC domain is routed via the Watford ISP, this is a single point of failure for both networks.

4.3 Key strategic issues

4.3.1 ICT Governance and management

4.3.1.1 The key issues identified with the Councils current governance are:

4.3.1.2 **ICT strategy implementation:** The IT infrastructure across both Councils has suffered from a lack of strategic direction over the last five years. Neither Council has adhered to a clear strategy for the provision of IT services to its staff and to the public – projects to provide specific services have instead been undertaken on a piecemeal basis, driven mainly by the individual client services rather than as a corporate priority. Whilst many of these projects have been successful this has led to a lack of consistency and co-ordination across the ICT services. Whilst a single ICT strategy does now exist for both councils, there is no clear evidence that that is being implemented or is driving business behaviour. This is likely to be a result of the current resource issues in IT and may indicate a lack of buy-in or focus by both Councils' senior management.

4.3.1.3 **Relationship between the Councils:** The current relationship for ICT services has WBC as the provider of all ICT and TRDC as a customer who has some steering input through the shared services joint committee. The recent history of TRDC having ICT provided as a managed service has left them expecting the same thing at a lower cost through the shared services / WBC ICT provision and it does not appear that enough ownership for ICT improvement has been taken or allocated to the TRDC directors. This uneasy relationship is likely to be a barrier for making improvements to ICT, and also means that TRDC are unaware of the current issues with the ICT infrastructure and hence are unable to properly plan or budget for the required changes.

4.3.1.4 **Nature of relationship between business and IT teams:** There is currently no clear process for managing the relationship between the ICT teams and the client services within the Councils. This relationship should exist to provide information to the client services on the ICT services that they currently use, including their performance, issues potential changes or upgrades and how they could be made better use of. The relationship should also be used to make sure that ICT have a good understanding of the client services aims and objectives and can advise on how ICT can be used to help achieve these cost-effectively and efficiently. Currently, ICT solutions tend to be driven and led by business areas rather than ICT which leads to increased cost and support complexity through a lack of coordination and cohesion across the Councils.

4.3.1.5 Currently a relationship does exist, but at a basic level and thus not able to provide a high level of advice and guidance to client services at the right time. Client services therefore tend to make their own decisions on ICT requirements, priorities and budgets and look to ICT to support and deliver these rather than to provide a cross-council service. Improving these relationships would help to cement the idea of ICT as a partner rather than a supplier, and would ensure that ICT changes and projects could be viewed at a Council level rather than a business unit level, helping to reduce costs and improve services.

4.3.2 ICT delivery

4.3.2.1 The key strategic issues identified with the Councils' current ICT provision are:

4.3.2.2 **Lack of documentation:** There is a critical lack of documentation about the IT infrastructure from both Councils. The result of a poor handover of the Steria contract for TRDC and a lack of processes and high staff turnover in the WBC IT team has resulted in there being very little

information available on the topology of the network, on the setup and configuration of the servers, on server warranties and on the deployment and configuration of the applications. This is leading to a number of support issues in addition to making it more difficult to implement minor and strategic improvements to the ICT infrastructure as there is no baseline to track these against.

- 4.3.2.3 **Lack of clear processes:** There are few clear, documented processes for much of the daily ICT delivery activities such as incident, problem and change management, configuration management, service desk scripts, service level management, service transition and relationship management. Whilst a lack of documented processes does not mean that these do not happen, there is a lack of consistency and much of the work is reactive rather than pro-active. An example of this is that there is no clear process for managing calls between ICT staff, or for communicating progress to users. Consequently, users often feel that their problem is not being addressed, and then call the service desk again resulting in increased call volumes.
- 4.3.2.4 This lack of processes allows staff to deal with many of the requirements and calls quickly as they can choose the most appropriate and quickest path for each individual activity, but this happens at the expense of traceability, learning and communication. The impact of this issue is that different actions are taken depending on which ICT staff member is dealing with a query or problem, there is no clear audit trail or management reporting and the risk to the ICT services is increased as issues and problems are not being consistently tracked or reviewed.
- 4.3.2.5 **Lack of resource:** There is currently a lack of ICT resources, particularly for answering calls from users and for implementing ICT projects and change in response to business area requests.
- 4.3.2.6 It is clear that the steady-state volume of calls (an average of 50 calls per day in total) to the service desk is manageable by the four service desk staff (including service desk manager). However the current condition of the ICT infrastructure and network results in a large number of problems and incidents which lead to an influx of calls to the service desk that are often far more than the four service desk staff are able to cope with. This results in other members of the ICT team being asked to cover calls and hence stopping the work that they are doing. The net result of this is that ICT changes, fault fixes and projects can take much longer than originally anticipated due to the lack of focus that results from resources continually moving between roles. It also results in a reduction in customer service as the temporary service desk staff are unlikely to understand service desk processes and may not have the knowledge needed to deal with the call effectively.
- 4.3.2.7 This situation has also resulted in users calling particular ICT staff directly rather than calling the service desk, as this tends to lead to a quicker solution. The impact of this is that those staff that are called end up being very busy and often unable to deal with calls routed through the service desk and can lead to a lack of knowledge sharing between ICT staff as new problems and fixes are not communicated effectively. This can also lead to a lack of management information about user activity as these calls may not be logged.
- 4.3.2.8 This lack of resources also makes it difficult for the ICT teams to respond to all requirements from the different business areas, particularly as there is no clear governance to manage and prioritise ICT projects and to ensure that there is no duplication of requirements or effort.
- 4.3.2.9 **Low understanding of infrastructure:** The lack of documentation and legacy issues detailed above has led to a situation where the Council ICT team does not have a complete understanding of the infrastructure, including the age and supportability of the hardware. There is also a very variable level of knowledge on the infrastructure and applications within the ICT

teams. This has many impacts on users, including higher risk of changes, lower levels of support and more difficulty in implementing new or updated services.

- 4.3.2.10 **Lack of ICT staff knowledge:** The Councils current ICT staff suffer from a lack of knowledge about the ICT systems and infrastructure. There are two reasons for this: one is that the legacy nature of the IT and the lack of handover from the Steria TRDC contract has left a knowledge gap and the other is that there is currently no process or mechanism for sharing knowledge within the ICT infrastructure team. This means that there are ‘pockets’ of knowledge where one individual understands how a particular server or piece of network hardware is set up but this is not documented or shared with any of the other team members. Where there is a lack of knowledge due to the legacy nature of the systems, no resource has been made available to review the infrastructure and fill in the knowledge gaps so this currently happens only if that element of the ICT infrastructure is affected by an issue. The impact of this is that ICT issues take much longer to address than they should, and that the ICT risk is considerably higher than needed due to the lack of distributed knowledge. If the correct person is not available then a problem is unlikely to get fixed.
- 4.3.2.11 This problem is compounded by the current lack of team activities. The ICT infrastructure and service desk teams have irregular team meetings and have very few opportunities to share knowledge and ideas with each other outside of immediate problems or business projects.
- 4.3.2.12 **Little or no monitoring:** The IT infrastructure and applications hosted on it have very low levels of monitoring. There are no applications used by the ICT team to view statistics on the usage levels of the servers (including CPU use, memory use etc.) and there are no applications that monitor the ongoing usage and performance of the individual services in use by Council staff and the public. There is a tool available that monitors the network usage over the Councils data network, however this has only recently been put to use and is only a trial version of the tool and hence can only monitor a small portion of the network at any one time. The impacts of this are that potential problems are not identified until they impact users and that it can take longer to find and fix faults.
- 4.3.2.13 **Poor performance:** Users in WBC are currently suffering poor performance on the majority of their ICT services. This seems to be due to the use of thin client technologies, most likely due to the thin client servers being overloaded. This is impacting their efficiency as well as their ability to deal with customer queries. Users in TRDC do not report similar problems, however, with the exception of shared services, they are using thick clients. It is clear from detailed server monitoring that the servers hosting TRDC applications are running very close to their resource limits and are likely to start experiencing problems in the near future.
- 4.3.2.14 **Duplication of functionality between Council systems:** Both Councils have a number of IS applications in use in addition to the shared services. There is a large amount of duplication in these applications due to the separate purchasing done before the Councils agreed to the shared services strategy and current lack of ICT procurement governance, for example election systems, content management and CRM systems. This duplication leads to an increase in costs when viewed as a whole and is likely to hinder the Councils’ exploring further efficiencies through shared service delivery.
- 4.3.2.15 **Low level of inter-operation or data sharing:** The piecemeal approach to IS application sourcing and implementation, and lack of consistent approach to IS architecture has meant that many of the Councils’ applications are not currently able to communicate with each other or share data. This lack of integration means that Council staff often have to re-enter or duplicate data across systems, leading to inefficiency. It is also likely to impact on the quality of services delivered to the public, as staff are likely to find it difficult to find all information about an individual or family when that information is stored across multiple systems. This is also likely

to impact on the implementation of public self-service facilities as these are likely to require access to a complete set of information about any particular individual or family – this would be very difficult to provide at present.

- 4.3.2.16 **Redundancy levels:** The level of redundancy on many of the Councils' systems is low, leading to a high risk and a number of recent incidents. Many of the systems do not have a high level of redundancy as a result of the high usage levels and low level of hardware specification. Where this is not an issue the low level of documentation and technical knowledge often means that the potential redundancy is not best used or correctly enabled. Additionally, the WAN infrastructure is overcomplicated with many points of failure that further impact the overall redundancy of the infrastructure.
- 4.3.2.17 **Training:** There is a lack of training for both users and ICT staff currently. Both of these can be put down to the current resource problems in the ICT team: there is little time for ICT staff to take extra time off for training courses and there is no time for ICT staff to provide training for users or to create self-help facilities such as web-based guides for application use. This ultimately results in more problems for users and more calls to the ICT service desk because ICT staff are not able to address an ICT problem quickly, or because users call for help that could have been provided elsewhere.
- 4.3.2.18 **Software provision:** The levels of software provided to Council staff are often older versions. Whilst this does not have a particular impact for some applications such as accounting packages or CRM systems, other software such as web browsers is causing issues for users when newer releases are not implemented. For example: provision of an older web browser prevents Council staff from accessing some of the newer web services as the required functionality does not exist in the older version. This often prevents Council staff from being able to access the same services or information as members of the public, and hence they are not able to provide appropriate advice and guidance.
- 4.3.2.19 **Lack of self service:** There are very limited automated and self-service tools available to Council staff, members and the public in order to allow them to access ICT services easily or manage problems themselves. Outlook Web Access (OWA) is in place at TRDC and is currently being piloted at WBC to allow staff and members easier access to their council email. There are further tools that could be implemented to allow increased functionality for these stakeholders, including automated password resets, online forms and improved web search tools. The implementation of more self-service type applications will provide greater flexibility for staff, members and the public alike when interacting with Council systems and is likely to reduce ICT support costs.

4.3.3 Security and information insurance

4.3.3.1 The key issues identified with the current security and information assurance procedures are identified below.

4.3.3.2 **Data security:** The Councils, whilst aware of their legal obligations, do not have strong procedures in place to safeguard data. In particular, if the Councils wish to enhance home and remote working, then there is a need to ensure that sensitive data accessed remotely by employees and members is secure, both in transit and if used on a personal, non-Council, PC. The current VPN solution secures the channel used to access council systems and data but does not secure the end point. Similarly, Outlook Web Access (OWA) and personal email accounts that have Council email forwarded to them do not ensure that the device being used to access them is secure and hence any data accessed (and cached) is at risk.

4.3.3.3 There does seem to be a lack of understanding across most Council staff about the importance of data security and the potential implications of any breaches. This is particularly true when discussing restrictions around the use of portable data devices such as USB memory sticks.

4.3.3.4 **Personal computer use:** The use of personal PCs for business purposes should be reviewed with a view to stopping this practice, and suitable training and management processes need to be developed. The Councils have no control over the security of the PCs and the network they are attached to potentially enabling these PCs as an attack vector to Council data if they are not correctly patched or anti-virus software is not run. Additionally, the Councils need to carefully consider the licensing of software, as if home PCs are used, they may not have appropriately licensed software to undertake Council business. The security policy for off-site working needs to be carefully considered to ensure that the Councils' data is protected.

4.4 Summary of key strategic ICT Issues

4.4.1 The key issues detailed above can be summarised as the following:

- a. There is a lack of time for and focus on clear ICT governance at the highest level in both organisations;
- b. Client services tend to make ICT decisions in isolation rather than collaboratively with ICT and other client services;
- c. There are disparate IT systems across both Councils leading towards higher cost of ownership and lower integration opportunities. Additionally, business areas define solutions rather than requirements which leads to higher cost and poor support availability;
- d. There is a lack of an integrated approach to data and information which reduces efficiency and customer service;
- e. There is a lack of guiding architecture design and governance to ensure best fit of new or changes to technology leading to lack of interoperability along with longer lead times to implement;
- f. There is a lack of documentation on ICT infrastructure and IT management and support processes;
- g. Customers are unable to get all the information they require to run their lives effectively via a range of electronic medias;
- h. The current ICT systems do not support common working and processes which is a fundamental element of transforming the way the Council works;
- i. There is a lack of joined-up ICT procurement approach, leading to lower service levels and ability to deliver and support the objectives of the council through IT;
- j. There is a lack of flexibility in providing ICT solutions that meet the needs of staff, members and the public.

4.5 Key Strategic Requirements and Themes

4.5.1 Strategic requirements

4.5.1.1 In undertaking the analysis and understanding where the Councils are today with regards to ICT provision and then reviewing where the Councils need to be, a number of key requirements and strategic themes have been highlighted.

4.5.1.2 Key strategic requirements to the provision of ICT have been identified as:

- a. Fitness for purpose;
- b. Reliability;
- c. Agility;
- d. Flexibility;
- e. Efficiency;
- f. Security;
- g. Cost effective.

4.5.2 Key Themes

4.5.2.1 A number of key strategic themes have been identified as a result of the information analysis. The strategic options and recommendations will be developed around these themes in order to make it clear what issues the individual recommendations will address.

4.5.2.2 The themes that have been identified are:

- a. ICT Governance and Shared Services;
- b. ICT Service Delivery;
- c. IS Architecture Management;
- d. Performance Management;
- e. Flexible Working.

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5 Options analysis and recommendations

5.1 Purpose of this section

- 5.1.1 This section presents the recommendations for addressing the ICT infrastructure issues and develops the options and recommendations for an updated ICT strategy for Watford and Three Rivers Councils.
- 5.1.2 The recommendations made for addressing the current ICT infrastructure issues are a clear list of actions focussed on improving the users' experiences in Watford and on ensuring that the Three Rivers infrastructure does not start to present issues.
- 5.1.3 The strategic options and recommendations will be developed around the strategic themes identified in Section 4 in order to make it clear what issues the individual recommendations will address.
- 5.1.4 The strategic themes that have been identified are:
- a. ICT Governance and Shared Services;
 - b. ICT Service Delivery;
 - c. IS Architecture Management;
 - d. Performance Management;
 - e. Flexible Working.
- 5.1.5 The potential options for each theme are introduced, reviewed and finally recommendations are made to address the identified issues.

5.2 Current ICT Infrastructure

- 5.2.1 The recommendations for addressing the issues and risks identified with the current ICT infrastructure are as follows:
- 5.2.2 Improve the Watford thin client user experience by ensuring sufficient computing resources are available to provide a fast and reliable service to all users, including local and remote. This will involve:
- a. Upgrading RDP servers with a 64 bit operating system to enable them to make use of the recently installed RAM – the current operating system cannot make use of the additional RAM without making changes to the core software that will invalidate the support agreement;
 - b. Obtaining definitive sessions-per-server scaling from the 3rd party provider to understand what the current capacity is supposed to be;
 - c. Deploying additional or further upgraded (e.g. more memory and higher specification CPUs) RDP servers to ensure that enough hardware resources are available to provide services to the current number of users. The number of servers required can be calculated from the scaling information in the task above;

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- d. Ensuring that there are identical server specifications across all RDP servers – this will ensure that the servers are supportable and allow load-balancing to make best use of the hardware available.
- 5.2.3 A further option to improve thin client performance may be to reduce the thin client requirements by deploying thick client solutions to some Watford staff. This should only be done as a last resort as it will further complicate the IT support arrangements and may only end up moving the ICT hardware resource issues on to different servers.
- 5.2.4 Address the servers at both WBC and TRDC that are currently operating near their limits by upgrading or replacing them as relevant. This will prevent any related problems or incidents occurring and enable server monitoring to be improved. It should be noted that once the identified issues with all of the servers have been addressed, further issues may come to light that are currently masked, particularly by the thin-client problems. Further investigations may be needed at that stage to identify the cause of these.
- 5.2.5 Conduct a full network infrastructure audit to allow the IT support staff to manage it appropriately, easily and quickly. This will involve:
- a. documenting and mapping the network, including all network hardware such as switches, routers and load balancers, its type, configuration, physical connections, firmware and IT services supported;
 - b. documenting the configuration of all servers, and the applications that use them;
 - c. documenting the suppliers of all infrastructure items, contact details and warranty information;
 - d. documenting the support matrices for all ICT infrastructure;
 - e. adding or updating labels to all ICT infrastructure hardware and cabling to allow quicker identification and resolution of issues.
- 5.2.6 Improve the system wide monitoring currently in use for both Councils to allow early identification of faults and issues by:
- a. Deploying a licensed hardware monitoring tool, such as PRTG Admin to provide in depth server metrics and warnings;
 - b. Establishing a baseline for network and network equipment utilization – this will allow alerts to be automatically produced if utilisation peaks are experienced;
 - c. Establishing a baseline for each individual server – again these will allow alerts to be generated if issues are likely to be experienced, potentially allowing problems to be averted. The baselines will require data covering an entire working cycle spanning a day, week and month;
 - d. Set and monitor the alerts or alarms based on acceptable levels of equipment and network capacity utilization.
- 5.2.7 Improve the network reliability by:
- a. Ensuring that the SolarWinds network monitoring tool is used to confirm that switches and routers are operating correctly and issue alerts if issues are likely to be seen;
 - b. Segmenting the network into separate pools of users accessing different resources. This will help to reduce the numbers of users impacted by any problems and will allow the IT support teams to address and resolve any issues much more quickly and easily;

- c. Identifying the IT hardware and services that make the most demands on the network (using the network monitoring tool) and ensuring that the network bandwidth available to them is as large as possible. This could be further addressed by providing replicated or duplicated resources across the network to provide more opportunities for applications and users to access data, and hence reducing delays.

5.2.8 Improve the remote user experience by:

- a. Ensuring that users requiring remote access are able to use an appropriate application. For example, users requiring access to email only (such as Council members) can make use of Outlook Web Access and do not need to use VPN applications. This will reduce the demands on the VPN applications and allow a faster, more appropriate service to be provided to all remote users.
- b. Ensuring that the capacity on the VPN concentrators is sufficient to meet the identified user needs;
- c. Reviewing the current backup, replication and other out of hours activities and ensuring that they do not clash with the most common remote user access times;
- d. Communicating with remote users to make them aware of the optimum times to access the system, particularly those that need to access the full set of applications over the VPN solution.

5.2.9 Define and document clear governance processes and procedures for the backup of systems and data. This will ensure that all information is routinely back-up as appropriate, that back-up processes do not clash and that support problems that impact or are caused by back-ups can be identified and managed.

5.2.10 Configure the (unused 8Mbit) Easynet ISP connection at TRDC to be used to create a failover internet access point to address the current single point of failure based on the access at Watford.

5.3 ICT Governance and Shared Services

5.3.1 Introduction

5.3.1.1 Both Councils clearly have a number of challenges ahead based on the spending cuts announced and increasing expectations of the public in terms of services delivered. Successful ICT governance will allow the Councils to make the best use of ICT in order to achieve their organisational objectives and meet these challenges. It has three components:

- a. What decisions need to be made?
- b. Who has decision and input rights?
- c. How are decisions formed and enacted?

5.3.1.2 Effective ICT governance will also:

- a. Ensure that all ICT investment priorities are aligned with the corporate priorities;
- b. Help the Councils make better and faster ICT-related decisions;
- c. Effectively manage risks;
- d. Build trust through transparency;
- e. Synchronise ICT with business strategy;

- f. Encourage desirable behaviours in the use of ICT and sharing of best practice;
- g. Increase the business value of ICT and lower total cost of ownership.

5.3.1.3 Given the central role of ICT within the organisation, it is critical that ICT participates fully within a wider organisational Governance structure to ensure ‘joined-up’ thinking and consistent decision-making right across the organisation.

5.3.1.4 A robust ICT governance structure will detail roles and responsibilities, and who inputs to and who makes different types of strategic and operational decisions relating to ICT. The governance framework also controls the prioritisation of ICT projects and investments. The governance framework should be owned by an individual and communicated to all stakeholders. All ICT decisions should go through that person, should be communicated in a timely manner and effectively followed through.

5.3.1.5 The likely benefits of having an ICT Governance framework are:

- a. Improved effectiveness: Ensures that ‘good’ decisions are made in acceptable timescales.
- b. Improved efficiency: Ensures that ICT expenditure and activities are strategically aligned, minimising wasted investments.

5.3.1.6 At present, the ICT governance for the Councils is mainly part of WBC, with TRDC acting as a customer for all of their services and providing some input to the SSMT and Joint Committee. However, as these cover other services (e.g. HR) in addition to ICT the time available to discuss and plan ICT developments is minimal.

5.3.1.7 The development of ICT is being held back by the half-way house of the current Shared Service arrangement, and by the lack of a clear partnership arrangement between the two Councils. In addition to this, the current ICT service is not able to provide a sufficiently proactive ICT function that helps drive the business and fosters a partnership between ICT and business areas. Currently, ICT is very much seen as a (poorly performing) service rather than a valued partner by the business areas in both Councils. The key challenge for ICT governance is to elevate the status of ICT, improve the service being delivered and form a partnership with the business.

5.3.2 Governance Options

5.3.2.1 The governance options focus on how the two Councils work together to discuss and agree ICT policy, requirements and strategy. The options identified are:

- a. **Option 1a: No change:** WBC continues to manage IT with TRDC as customer and deliver some applications as shared services, moving towards application harmonisation.
- b. **Option 1b: Create an ICT steering group and accelerate delivery of all ICT as a shared service:** This option would involve speeding up the harmonisation of all ICT systems and the creation of an IT steering group with officers from both Councils, chaired by the Head of ICT.

5.3.3 Governance Discussion

Option 1a: No change

5.3.3.1 Making no change to the current ICT governance and shared services management would be likely to prevent ICT from moving away from the current position into being a functional and trusted partner to all business areas. The current governance does not allow IT to be managed as

a partnership with the clients services teams in WBC, struggles to drive the full involvement of TRDC and does not allow detailed discussions to be held to fully link and harmonise the ICT strategy with the business strategy and ensure that all directors are bought in to the value of ICT. This will not help the councils meet their strategic objectives, and for this reasons this option is discounted.

Option 1b: Create an ICT steering group and accelerate delivery of all ICT as a shared service

- 5.3.3.2 This option involves a closer engagement with TRDC for managing ICT services through setting up an ICT steering group to replace the ICT element of the shared services board and agreeing to the delivery of all Council IS requirements as a shared service.
- 5.3.3.3 The ICT steering group would be formed of senior representatives from both Councils and would be tasked with setting and agreeing the ICT strategy for both Councils, for setting and agreeing ICT budgets and for managing the direction of Council ICT services on a month-by-month basis. The steering group would also be responsible for prioritising projects and managing any conflicts between client services over the use of ICT resources. It should be chaired by the Head of ICT, and would report to the SSMT or Joint Committee.
- 5.3.3.4 The creation of this steering group would support the ICT element of the shared services boards, meaning that a clear focus would be given to ICT issues and plans for both Councils and providing a forum with the appropriate seniority and knowledge to make decisions and drive the implementation of these within both Councils. This steering group would also foster a closer working relationship (for ICT purposes) between the two Councils that would enable all ICT services to move more quickly towards harmonisation.
- 5.3.3.5 Removing the current duplication in IS across both Councils will allow for greater economies of scale, easier information sharing and will simplify the support requirements. The current plans for harmonising the seven duplicate systems are likely to be difficult and protracted to deliver because of the lack of governance and prioritisation. The implementation of clear governance is likely to enable the harmonisation roadmap to be delivered more quickly and thus the cost savings and efficiency benefits can be delivered sooner.
- 5.3.3.6 These benefits include ensuring that each Council receives the best system, better integration of systems through a reduction in complexity and the provision of a much greater scope for flexibility and continuous improvement, without negatively impacting the delivery of services to the public.

5.3.4 Governance recommendation

Recommendation

- 5.3.4.1 The recommended option for Governance and Shared Services is Option 1b: Create an ICT steering group and deliver all ICT as a shared service. This would require the Council to agree a Terms of Reference for the ICT steering group and its membership, and hold discussions to agree the split of responsibilities ICT responsibilities between the shared services boards and the ICT steering group. A sample Terms of Reference for this group is presented at Annex A.
- 5.3.4.2 This will then require the steering group to discuss and agree the roadmap for harmonising ICT systems and decommissioning old applications across both Councils. This will need to take into account current software contracts, hardware limitations, user licences and user training in order to agree migration plans for each duplicated system.

5.3.4.3 The implementation of a harmonised ICT environment is also likely to be contingent on improvements to the management of the ICT Architecture.

5.3.4.4 It is further recommended that the Councils review and update the communication and processes around IT and data security to ensure that all staff are aware of the requirements, of the potential impacts of security lapses and of the Councils' processes for managing IT and data security. This could include IT and data security training for all staff and implementing clear policies and guidelines for accessing and transferring Council data, particularly data on individuals. This should also cover the use of portable devices for storing and accessing data.

Benefits

5.3.4.5 This is likely to lead to an improved ICT service to both Councils and a reduction in complexity of the ICT systems which will improve support and reduce costs in the long term. It will also improve the understanding of ICT across directors in both Councils and provide a clearer path for providing ICT guidance and making strategic decisions that support the objectives of both Councils.

5.3.4.6 It is also likely to enable much easier integration with ICT services provided by other public sector organisations in the future, allowing expansion of the shared services concept and allowing the Council to take advantage of government ICT initiatives such as G-cloud as they become available.

Costs

5.3.4.7 The cost of running an ICT steering group in addition to the shared services joint committee is likely to be minimal. Some external costs may be required to support the implementation of the ICT steering group, however these are unlikely to be more than £5k. A time commitment from those on the steering group will also be required.

5.3.4.8 The cost of harmonising the ICT systems is already being calculated by the Council ICT team as a result of the roadmap development. Our experience suggests that the costs for this are likely to be split between the cost of resources to manage the project and the cost of any additional licences or hardware required to add additional users to a current system, however this cost is likely to be offset by a reduction in costs due to the decommissioning of current ICT systems that are not to be shared. It is expected that the resource requirement for this project will be 1.5 person-years, on the basis that the harmonisation is achieved using existing applications rather than selecting and implementing new ones.

Timescales

5.3.4.9 The likely timescale for implementation of an ICT steering group is three to six months to agree the Terms of Reference and transfer responsibility. The harmonisation of all ICT systems is likely to take longer, it is anticipated that this will take between one and three years to fully harmonise all ICT between the two Councils, however the benefits will start to be delivered as soon as the first harmonised system is implemented. This is likely to take longer if an ICT steering group is not implemented.

5.4 ICT Service Delivery

5.4.1 Introduction

5.4.1.1 ICT Service Delivery covers the management of the ICT infrastructure and applications together with the relationship management of customers and users. The areas that this area normally includes are:

- a. IT operations, including incident, problem and change management;
- b. IT support teams;
- c. IT service management;
- d. IT service transition.

5.4.1.2 The main function of this area is to ensure that the IT services being delivered are fit for purpose and to maintain a relationship with users to ensure that the services will remain fit for purpose in the future.

5.4.1.3 A set of best practice guidance called the IT Infrastructure Library (ITIL), together with the ISO20000 accreditation exists for service delivery.

5.4.1.4 ITIL is a set of standards and recommended processes for IT Service Management used by the majority of global IT suppliers. It covers a broad scope of service elements and processes and includes guidance on roles and responsibilities as well as process flows and timescales.

5.4.1.5 The ITIL guidelines, and good service management in general, allow ICT to remain closely linked to the business that it supports in order to continue to deliver appropriate, well managed and cost effective services.

5.4.2 ICT Service Delivery Options

5.4.2.1 The ICT Service Delivery Options identified are:

- a. **Option 2a: No change:** The ICT team continues to deliver ICT services with no clear, consistent processes to follow.
- b. **Option 2b: Implement ITIL-based processes to cover all Service Delivery activities:** This option would review all of the current ICT delivery processes to identify gaps and implement new processes or update existing ones to provide a clear ICT delivery framework.
- c. **Option 2c: Outsource all Service Delivery activities except service management:** This option would involve outsourcing the delivery of all ICT activities to a 3rd party except for the relationship management with the business areas. In this way the ICT team would be responsible for advising and directing the business on the use of ICT and would use a 3rd party to deliver the required services. These could be hosted on Council owned infrastructure or externally.

5.4.3 ICT Service Delivery Discussion

Option 2a: No change

5.4.3.1 The current ICT service delivery is not meeting the needs of the Council users in terms of performance, engagement, flexibility or response. This will not help the councils meet their strategic objectives, and for this reasons this option is discounted.

Option 2b: Implement ITIL-based processes to cover all Service Delivery activities

- 5.4.3.2 This option involves creating a clear framework under which the Council ICT services will be delivered. The framework will include all aspects of ICT service delivery such as:
- a. transitioning new services and major changes into the live environment;
 - b. managing incidents, problems and service changes;
 - c. asset and configuration management;
 - d. managing service levels and availability;
 - e. backup and disaster recovery;
 - f. managing relationships with customers;
 - g. service desk provision;
 - h. continuous improvement;
 - i. supplier management.
- 5.4.3.3 A project will be needed to implement this option. The framework will be created by documenting the roles and processes needed through discussions with the senior ICT management and Council directors, reviewing the current ICT processes and updating them where possible. Where processes cannot be updated or do not exist new ones will be created.
- 5.4.3.4 Once the documentation for this framework is agreed and signed off, the ICT teams (and business area staff where appropriate) will be trained in the new process and the service delivery will be transitioned on to the new framework in phases over a transition period. The phases will be based on the service priorities as agreed during the planning phase.
- 5.4.3.5 The project will also include regular, detailed communication to all Council staff and members, and will also focus on team building and cross training to ensure that the processes implemented can be used efficiently and effectively.
- 5.4.3.6 It is also recommended that this framework includes improved reporting, both to individual business areas and to the user community at large. This reporting would typically include service performance (including reports against existing SLA's), current service use, costs and improvement activities. It is anticipated that the ICT business management team will have sufficient resource to manage the improved and updated customer-management processes.
- 5.4.3.7 This option is likely to require a significant time investment from existing Council ICT staff, and will require commitment from the business areas to provide support to the ICT team during the transition. This option may also require external support to help generate the new framework and support its implementation.

Option 2c: Outsource all Service Delivery activities except service management

- 5.4.3.8 Outsourcing the delivery of all ICT services would enable the Council to focus its resources on core Council activities and allow specialist companies to provide the ICT services using best practice processes and with the economies of scale a large organisation can provide.
- 5.4.3.9 This option will require a procurement phase where the service delivery supplier is chosen, and a transition phase where the responsibility is transferred.

5.4.3.10 The Council ICT team would retain responsibility for engagement with the business areas, and for advising them on ICT use. The Council ICT team would also manage the relationship with the service provider and as such would still require a 'retained layer' which would consist of a number of the existing staff. However, it is anticipated that a number of the current ICT staff would need to be transferred to other jobs in the Council or transferred to the chosen 3rd party supplier under TUPE regulations if this option is selected.

5.4.4 ICT Service Delivery Recommendation

Recommendation

5.4.4.1 It is recommended that the Council initially adopt Option 2b: Implement ITIL-based process to cover all service delivery activities. This option is likely to deliver a similar service in terms of quality to the outsourcing approach, but will avoid any costs and other difficulties associated with role-guarantees, redundancy and TUPE. It will also ensure that the Council is well placed to take advantage of any of the government ICT initiatives such as G-cloud and the PSN without having to change contracts with a 3rd party.

5.4.4.2 The Council should review the implementation of this option after a suitable period of time to ensure that services have improved in line with expectations. If they have not, Option 2c: Outsource all Service Delivery activities except service management should be considered in order to ensure that the Councils' ICT services meet their requirements. The recommendation is that this is reviewed after up to 24 months.

5.4.4.3 Selecting this option will also see the Council develop its skills as an organisation capable of delivering best practice ICT services, and will therefore put it in a good position to offer ICT services to other public sector organisations in the future, as the public service ICT model moves further towards larger shared services.

Benefits

5.4.4.4 The anticipated benefits of implementing this recommendation are:

- a. IT systems will be more stable, and problems can be addressed more quickly;
- b. Issues with IT systems can be more easily resolved;
- c. ICT staff have clearer responsibilities, which can also be communicated to client services;
- d. ICT can be more easily provided to other organisations as a shared service.

Costs

5.4.4.5 The cost of implementing ITIL-based service delivery processes is likely to include costs associated with back-filling resources in the current ICT team and costs associated with the provision of external support.

5.4.4.6 The cost of providing additional resource in the ICT team is likely to be up to 1.5 person years at the current rate for a junior ICT engineer, approximately £60k including on-costs.

5.4.4.7 External support is likely to be needed for the development of the new processes, and their implementation. This is likely to require between 50 and 100 days consultancy which is £35k to £70k.

Timescales

- 5.4.4.8 The expectation is that the implementation of this option would require a minimum of two council staff to be trained to ITIL practitioner level. They would then develop the processes and lead the implementation of them. This is likely to take between six months and one year to implement, on the basis that these staff are committed on a ¾ time basis to ensure that they also stay current with the ICT systems.

5.5 IS Architecture Management

5.5.1 Introduction

- 5.5.1.1 An IS Architecture (or Technical Architecture) is a blueprint that shows how the organisation's different access channels, systems, business applications, platforms, services, tools and infrastructure components fit together. An Architecture would typically include:

- a. A map of systems and business applications, and the interfaces that connect them;
- b. Standards for technology platforms and tools;
- c. A map of hardware infrastructure and data and voice network components;
- d. A comprehensive data model, showing how data is defined and organised;
- e. A unified framework in which new ICT developments and implementations are placed;
- f. A list of applications in use across the various departments.

- 5.5.1.2 A good Technical Architecture helps ensure that all of these diverse pieces fit together effectively — both now, and in the future. It creates alignment between systems, data, and infrastructure. It provides a standard platform and tools to get new systems and capabilities up and running quickly. An excellent Architecture is scalable and flexible enough to adapt to the organisation's changing needs.

- 5.5.1.3 The organisation needs to understand its Technical Architecture and be capable of exercising a basic level of control over it. This is evidenced by up-to-date documentation of the Technical Architecture and the existence of risk management. Design principles, policies, standards and rules should be agreed and actively communicated to the organisation and suppliers.

- 5.5.1.4 The Head of ICT is traditionally responsible for setting the technology standards and defining the way that data is used and stored across the Councils. This section therefore addresses the framework and management of services. The likely benefits of improving these are:

- a. Improved effectiveness: Risks within the Technical Architecture can be more easily managed.
- b. Improved efficiency: A stable, well managed Technical Architecture supports improved productivity.

- 5.5.1.5 The Councils lack a coherent strategy for delivering business applications, and they have often developed in piecemeal fashions to suit the demands and requirements of individual client services, without due regard for the overall synergy of the Council IS requirements. Consequently, a number of key corporate applications do not work well together and there are a variety of different systems used for similar services (e.g. content management, election systems, CRM and document management), which leads to increased effort and cost requirements.

5.5.2 IS Architecture Options

5.5.2.1 The options for IS architecture are as follows:

5.5.2.2 **Option 3a: No change:** The IS architecture continues to cause issues for users;

5.5.2.3 **Option 3b: Audit infrastructure and implement a clear set of technology standards and a unified framework:** This option would involve creating a baseline for the ICT infrastructure and setting up a number of standards and guidelines to ensure it is used and managed appropriately;

5.5.2.4 **Option 3c: Audit infrastructure and outsource IS architecture provision:** This option involves creating a baseline for the infrastructure though conducting an audit, and then outsourcing it's provision and management.

5.5.3 IS Architecture Discussion

Option 3a: No change

5.5.3.1 The current IS architecture is silo based, where individual client services make use of individual applications, and come to ICT with solutions rather than requirements. This is true of both Councils, but seems to be more prevalent in TRDC. The different applications are not linked together and the lack of IS standards and control has led to a complicated IS architecture that is expensive to support and difficult to integrate in order to provide a clear picture of all services and data to staff, members and the public. Continuing in this fashion would lead to further increased costs and would not achieve the Councils' strategic objectives – this option is therefore discounted.

Option 3b: Audit infrastructure and implement a clear set of technology standards and a unified framework

5.5.3.2 This option involves conducting an initial audit of the entire Council ICT infrastructure to ensure that everything is documented and that the ICT support teams understand the topology of the network, the configuration of the infrastructure and the configuration of the individual hardware elements. It then involves the development of an overarching architecture for ICT that enables effective use of IT solutions across the Council based around some key principles to i) drive modular approach to development of business requirements ii) allows better re-use of systems on the estate iii) enables better integration of systems across the Council and iv) enables any new processes to be optimised. A design authority would need to be agreed – this could either be part of the governance committee or could be a separate authority reporting to the Head of ICT. The design authority would own the standards and guidelines associated with the overarching architecture and would have responsibility for resolving conflicts, agreeing variations to the standards and for developing new standards and integration plans and for providing advice to client services as needed. The aim of this work would be to move towards a "Service Orientated Architecture", an architecture that describes an entity (e.g. application or enterprise) as a set of interdependent services. SOA provides for reuse of existing services and the rapid deployment of new business capabilities based on existing assets.

Option 3c: Audit infrastructure and outsource IS architecture provision

5.5.3.3 This option also involves conducting a detailed audit of the current IS architecture.

5.5.3.4 It then involves outsourcing the provision of the IS architecture to a 3rd party company. This would require procuring the service required, implementing it, communicating any new process

information to users and ongoing management of the relationship with the 3rd party. This option would provide flexibility in the provision of services and potential cost savings commensurate with the economies of scale that a 3rd party is able to realise, that are unavailable to the council.

- 5.5.3.5 In this option the Council ICT team would still manage the relationship with the service provider and as such would still require a 'retained layer' which would consist of a number of the existing staff. However, it is anticipated that a number of the current ICT staff would again need to be transferred to other jobs in the Council or transferred to the chosen 3rd party supplier under TUPE regulations if this option is selected.

5.5.4 IS architecture recommendation

Recommendation

- 5.5.4.1 It is recommended that the Council initially adopt Option 3b: Audit infrastructure and implement a clear set of technology standards and a unified framework.
- 5.5.4.2 Additionally, it is recommended that the Councils should adopt the following approaches to ICT Architecture to reduce costs, improve the flexibility of service provision and to better support business processes:
- a. Consolidate applications using the same technology: Continue to consolidate the operation of similar services which operate in different divisions to save maintenance and licensing costs, for example SQL databases and web content management;
 - b. Virtualise hardware: Continue the use of virtualised servers and cloud computing to reduce hardware requirements;
 - c. Support and guidance: Provide support and guidance, through the formal and informal information sharing mechanisms, relating to the best use of the architecture.
- 5.5.4.3 It is further recommended that the Council also review the implementation of this option after up to 24 months to ensure that it is meeting their requirements. If this is not the case, Option 3c: Audit infrastructure and outsource IS architecture provision should be considered to provide the efficient and effective IS architecture required by the Councils.
- 5.5.4.4 One of the main objectives for both Councils is to ensure that they can deal with the public in a number of different ways, and offer the public the opportunity to interact with the Council in the manner most convenient to them. Increasing the number of self service facilities available is therefore key to the Council strategy both for improving public service and for reducing operating costs and improving efficiency.
- 5.5.4.5 ICT plays a key role in delivering these services, both in providing the front-end functionality and by enabling Council processes to be improved to support increased self service.
- 5.5.4.6 At present, both Councils offer the public limited self service facilities online and on the telephone, allowing constituents to pay bills, review planning applications, buy tickets for events and make leisure centre bookings.
- 5.5.4.7 The Council strategies will require self service to evolve from providing transactional facilities to the provision of interactive services where constituents can easily find information, can apply for or change services and can review information held by the Council whenever (and potentially wherever) they like.

5.5.4.8 The provision of increased self service facilities will also enable the Councils to offer improved services to the public, such as visiting them at home to help with service queries or applications as they will no longer require direct access to Council systems to find the information needed to offer the right support.

Benefits

5.5.4.9 The anticipated benefits of implementing this recommendation are:

- a. An improved ICT service to divisions which is more flexible, responsive and better able to meet the differing needs of the divisions;
- b. A more efficient ICT service that makes better use of resources;
- c. An improved Management Information provision due to the centralisation of services, and hence knowledge;
- d. ICT systems which are more able to exploit current and new technologies through a co-ordinated approach;
- e. Easier systems management due to the increased knowledge about infrastructure and applications residing in the ICT team;
- f. Reduced cost of ICT provision through a more co-ordinated approach to development and delivery, reduced infrastructure costs and potentially reduced support costs.

Costs

5.5.4.10 The cost of implementing improved IS architecture management will include Council management time and is also likely to require independent support. The expectation is that three resources will be needed for approximately six months in order to put an architecture framework in place, to review and improve virtualization and to allow the common applications to share data. These resources could be internal resources who have spare capacity, external resources such as contractors or a mixture of the two. The cost of using external contractors only is likely to be around £150k. This does not include any costs for tools or hardware required.

Timescales

5.5.4.11 It is likely to take approximately three months to develop and agree a set of clear IS standards and between six months and one year to develop the Council applications to adhere to these standards.

5.6 Performance Management

5.6.1 Introduction

5.6.1.1 Performance management is about measuring how well ICT is delivered within the organisation. As a minimum, the scope of ICT must be defined and must be supported by performance measures and reporting.

5.6.1.2 Achieving excellence requires a cohesive and consistent ICT performance management framework which contributes to and supports the organisation's corporate performance management framework. An effective performance management framework will allow ICT to objectively evaluate its successes and failures and focus on continuous improvement in line with the holistic objectives of the organisation.

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- 5.6.1.3 The likely benefits of improved performance management are:
- a. Improved effectiveness: Risks within the Technical Architecture can be more easily managed.
 - b. Improved effectiveness: ICT services are of consistently high quality, resulting in high internal and external customer satisfaction.

5.6.1.4 At present there are a number of areas which could be improved, particularly with regard to reporting IT performance to the different client services and responding to their individual needs. These areas include proactive communication to staff around costs and performance, service management relationships with client services and providing further clarity around the different costs and options for hosting and delivering business applications.

5.6.2 Performance management options

- 5.6.2.1 The options for performance management are as follows:
- a. **Option 4a: No change:** Continue to use generic SLAs for shared services and minimal SLAs elsewhere.
 - b. **Option 4b: Create individual SLAs at a Council level for all ICT services:** Create more detailed SLAs that have clear information about all services provided to each individual council.
 - c. **Option 4c: Create individual SLAs with all client services for all ICT services:** Create more detailed SLAs that have clear information about all services provided to each individual business area.

5.6.3 Performance Management discussion

Option 4a: No change

5.6.3.1 Currently there is a generic SLA for the ICT shared services provided to both Councils. This generic SLA covers many of the requirements of the individual client services, but does not allow for flexibility in server-provisioning to meet any differing requirements, such as service times, incident responses and service improvements.

5.6.3.2 The lack of flexibility is likely to be a barrier to achieving a number of the Councils aims, particularly those around cost reduction and improved business process support.

5.6.3.3 This option is discounted on the basis that it does not support the Councils strategic aims.

Option 4b: Create individual SLAs at a Council level for all ICT services

5.6.3.4 This option would involve creating SLAs between ICT and the client services at an individual council level rather than with the client services themselves. This would go some way towards addressing the current gap in communications, but would not drive more direct communication between individual business areas and the ICT team. It is felt that this communication is needed to help build a better understanding between the business and ICT, and hence this option is discounted.

Option 4c: Create individual SLAs with all client services for all ICT services

- 5.6.3.5 There is a desire from many business areas for the ICT team to have a greater understanding of their specific requirements and as a result to have a well-managed SLA for their specific ICT services as well as general Council ICT services. Improving customer understanding and the management of these individual SLAs could provide more flexibility for these client services around service hours, availability and incident management. The knowledge gained by the ICT team as a result of these improvements would also enable improved scheduling, may lead to reduced support costs and will support improvements in the IT architecture as detailed earlier in this report.
- 5.6.3.6 The implementation of this option would be likely to require updated service management, reporting and service operations processes to support the different requirements and to improve the communications with divisions.
- 5.6.3.7 This option is likely to lead to reduced costs of service provision and support, to lead to improved business processes through greater understanding between business and IT and will lead to more flexible and responsive services.

5.6.4 Performance Management recommendation

Recommendation

- 5.6.4.1 The recommended option for Performance Management is Option 4c: Create individual SLAs with all client services for all ICT services. This would mean that specific SLAs suited to the service being provided and the business unit's requirements, e.g. for reliability and support would be discussed regularly with the head of service staff to ensure quality of service and the provision of future capabilities. The implementation of this is likely to be dependent on the recently implemented IT restructure successfully bedding, the governance recommendations being successfully implemented as well as the implementation of the ITIL processes. This is therefore a medium term recommendation.
- 5.6.4.2 It is recommended that these SLAs also be implemented in line with ITIL V3 best practice as this will ensure internal processes are in line with the industry standard.
- 5.6.4.3 It is also noted that the ICT team has already undertaken Socitm benchmarking related to their service. It is recommended that the Head of ICT should continue this benchmarking and ensure this information is effectively and clearly disseminated to the user community.

Benefits

- 5.6.4.4 The anticipated benefits of implementing this recommendation are:
- a. An improved ICT service which is more efficient as delivers fit-for-purpose services to users and is more aware of their future requirements;
 - b. A reduction in support costs based on improved understanding of customer requirements;
 - c. Improved customer satisfaction based on more communication and better transparency of service delivery.
 - d. ICT systems will be more closely aligned to business unit requirements;
 - e. Costs will be more predictable, and the cost impact of ICT decisions easier to understand.

Costs

- 5.6.4.5 The cost of this option is based on the ICT resources needed to create the SLAs and discuss and agree these with the Heads of Service. The expectation is that approximately 1.5 days will be needed for this, per SLA. Therefore this option is likely to require about 25 days effort in total.
- 5.6.4.6 If this was resourced externally, using a contractor to write the draft SLAs before the ICT management team discussed them with the business the cost would be around £8-10k.

Timescales

- 5.6.4.7 The timescale for implementing this option is likely to be four to six months to review and implement updated SLAs for all services. However, it is expected that this recommendation will not be able to be implemented for 18 months while the previous recommendations are in progress.

5.7 Flexible working

5.7.1 Introduction

- 5.7.1.1 The Councils have a desire to support sustainability, and to improve the working ethos of their employees. One of the enablers of this desire is to facilitate home and mobile working, as this may lead to a more efficient utilisation of space within the Council offices and offer employees flexibility in their work life and greater ability to deliver services to the public at convenient locations for them, rather than just Council offices. At present there is a mechanism to support home working through the use of VPN technology, but this is not seen to meet the needs of all users, particularly those who only want access to email who see the current VPN system as cumbersome and slow. Outlook Web Access is being used by TRDC staff and being piloted at WBC but is not yet available to all WBC staff. There is also no specific requirement for Council applications to be mobile-working enabled, although many are now delivered through an internet browser and hence easier to deliver to use remotely.

5.7.2 Flexible Working Options

- 5.7.2.1 The options related to remote working are as follows:
- a. **Option 5a:** No change: Continue to provide the Netilla VPN solution and Outlook Web Access at TRDC and continue to provide the Appgate VPN solution and pilot / rollout Outlook Web Access.
 - b. **Option 5b:** Adopt enabling technologies and review options to enable applications for remote working: Investigate the use of VoIP and Internet phone calls, linked into the council's telephony system to enable users to receive phone calls via the Internet at home, as if they were at their desk. Adopt further technologies to support access to council applications and databases from home and other remote locations, including opportunities to support access from mobile devices such as smart phones.

5.7.3 Flexible Working Discussions

Option 5a: No change

- 5.7.3.1 This option continues to give council staff the ability to access council systems remotely and sees the pilot of OWA through to completion and possible roll-out for WBC staff. This does not give council staff or members the flexibility that they require, and does not allow for applications to be accessed flexibly and via different devices. This option therefore does not meet the current and future needs of the council so is discounted.

Option 5b: Adopt enabling technologies and review options to enable applications for remote working

- 5.7.3.2 This option looks at providing increased functionality to staff, members and the public for accessing council systems when and where they need to, including support for different devices. The current access methods – VPN and OWA are kept and added to over time with technologies to extend the reach of the council telephone system using Voice over IP, to implement changes to applications to support different devices and operating systems such as iOS, Android and Windows mobile as they are made available by suppliers, and to continuously review requirements and opportunities for further improvements.
- 5.7.3.3 This would provide much improved functionality for all users, and would enable staff and members to work more efficiently.
- 5.7.3.4 These technologies would need to be linked to the council overall IS architecture as discussed earlier in this report, and their adoption would need to be discussed and reviewed through the technical design authority.

5.7.4 Flexible Working Recommendations

Recommendation

- 5.7.4.1 The recommendation is the councils adopt Option 5b: Adopt enabling technologies and review options to enable applications for remote working.
- 5.7.4.2 This will ensure that the council continues to provide flexibility for staff, members and the public around the use of IT systems and access to council information.

Benefits

- 5.7.4.3 The potential benefits of implementing this recommendation, based on users being able to access some or all of their key applications and files remotely, are:
- Increased flexibility for users, and potentially increased productivity;
 - Potential office space savings based on hot-desking;
 - Improved services to the public based on improving response times and the ability to deliver services in remote locations, such as individual's homes.

Costs

- 5.7.4.4 The costs for implementing flexible working technology vary greatly depending on the capacity and security requirements identified. They are likely to include costs for central hardware, software and implementation as well as user training.

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- 5.7.4.5 There may also be additional costs associated with providing hardware to users (e.g. laptops) and of providing broadband internet connections to staff homes, depending on the solution chosen.

Timescales

- 5.7.4.6 Timescales for implementation of flexible working solutions can also vary depending on the solution chosen. These could be from one month (to implement simple internet remote access) to nine months (to implement an updated application with provision for full mobile access through a multitude of devices).

5.8 Future considerations for ICT

- 5.8.1.1 ICT has to be seen as an enabler to deliver business efficiencies and as technology develops so any future procurement model needs to be flexible enough to allow new technology that will benefit Council operations to be considered. A number of innovative ideas currently being promoted in the UK Public Sector by the Cabinet Office, as discussed below.

G-Cloud

- 5.8.1.2 The main aim of the Government-Cloud (G-Cloud) is to provide applications and services which are hosted on and delivered from the internet or government networks (e.g. GSi, CJSX, GCSX, N3, etc) and accessed via a web browser. The development of the G-Cloud is one of the key initiatives of the UK Governments ICT Strategy. This service will be available to all 400 Councils and other Public Sector organisations in the UK.

- 5.8.1.3 This will lead to a programme of data centre rationalisation and consolidation that will deliver large cross-government economies of scale, meet environmental and sustainability targets and provide secure, resilient services. Aligned with development of the G-Cloud, this programme will reduce the number of data centres in use from the current many hundreds to provisionally between 10 and 12 highly resilient, secure data centres. Not only will this reduce cooling and power consumption by up to 75% on current infrastructure, it will also reduce IT infrastructure costs by up to £300 million per year.

- 5.8.1.4 Many organisations such as Microsoft, Citrix, VMware and Gartner have identified cloud computing as a delivery mechanism that offers lower up-front costs compared with on-premise products that IT teams must buy and support themselves.

- 5.8.1.5 The G-Cloud is a key enabler of savings as it provides a single access point for ICT services, applications and assets.

Software as a Service

- 5.8.1.6 With a tendency among a vast number of Public Sector bodies to use similar applications - for example payroll, human resources management and enterprise resource planning - the potential savings from delivering such applications via the cloud rather than building and supporting hundreds of separate versions are clear.

- 5.8.1.7 The idea is that a Government Applications Store (G-AS) is created to enable sharing and reuse of online business applications, services and components across the Public Sector. Rather than create bespoke solutions each time a requirement is identified, reuse will become the norm, with anticipated savings of over £500 million per year.

Open Source Software

- 5.8.1.8 Open Source software is software that is released for use without payment. Open Source Software is in widespread use, for example the Apache web server and Linux operating system. Open Source Software has less penetration into the office environment because of the need to retrain users and potential issues with interoperability with users of Microsoft Office products.

Public Sector Network

- 5.8.1.9 The Public Sector Network is a single holistic telecommunications infrastructure that will deliver converged voice and data communications. It is perceived that the Public Sector Network will deliver at least £500 million savings per year by 2014.

Desktop services

- 5.8.1.10 A new set of common designs for desktop services will be provided for use across the Public Sector. While all Public Sector bodies need to provide their staff with access to functions such as email, word processing, spreadsheets and internet browsing, historically each Public Sector organisation has separately specified, built and run its desktop service – creating additional cost and complexity. Instead, there will be a set of common desktop designs which conform to information assurance and sustainability requirements. All suppliers will be required to deliver common designs and shared services at the lowest price available. A £100 saving in operating cost per Public Sector desktop per year would yield an immediate saving of £400 million per year if all Public Sector bodies adopted best practice.

Bringing Innovation to the table

- 5.8.1.11 If an authority enters into any new ICT contract without the ability to refresh technology or break from the contract to join wider government initiatives that can clearly benefit the operations of the business then ultimately those legacy provisions will stifle the future development of the authority. It is therefore important to ensure that all future suppliers can update the authority on innovative ideas and that some type of benefit risk reward mechanism is in place to ensure that innovative technologies and ideas for business improvement are always considered.

6 Consolidated Strategy

6.1 Purpose of this section

6.1.1 This section presents the recommendations made against the individual strategic themes together as a complete strategy. It also includes details of the overall timeline, costs and potential benefits of adopting the strategy.

6.2 Recommendations and Next Steps

6.2.1 The recommendations made to improve the current provision of ICT to the Watford and Three Rivers Councils are:

6.2.2 **Recommendation 1: Address the current infrastructure risks and issues:** This will involve taking the following actions:

- a. Improve the Watford thin client user experience by ensuring sufficient computing resources are available to provide a fast and reliable service to all users, including local and remote. This will involve upgrading or replacing the current Watford RDP servers. This is likely to improve the thin-client experience but may highlight further issues with the infrastructure not currently apparent as the load shifts to other servers, such as application servers;
- b. Upgrade or replace the other Watford servers noted to be operating near their limits;

- c. Upgrade the TRDC servers which are currently operating near their limits in order to prevent any related problems or incidents;
 - d. Conduct a full network infrastructure audit and address any issues identified to allow the IT support staff to manage the IT services appropriately, easily and quickly. This is needed to address the current severe lack of documentation and knowledge of the IT infrastructure.
 - e. Improve the system wide monitoring currently in use for both Councils to allow early identification of faults and issues.
 - f. Improve the remote user experience.
 - g. Define and document clear governance processes and procedures for the backup of systems and data.
 - h. Configure the (unused 8Mbit) Easynet ISP connection at TRDC to be used to create a failover internet access point.
- 6.2.3 The combined benefit of these actions will improve the user experience at Watford, will ensure users at TRDC continue to experience good ICT service provision and will allow the support teams to easily address future issues and to pro-actively improve the ICT services.
- 6.2.4 **Recommendation 2: Governance and shared services:** Create an ICT steering group (with responsibilities as defined in Appendix A) and continue to make progress towards delivery of all ICT applications as shared services. This will require the Councils to agree a Terms of Reference for the ICT steering group and its membership, and agree ICT responsibilities across the SSMT, Joint Committee and ICT steering group. The expectation is that the ICT steering group will be chaired by the Head of ICT and report to the Joint Committee or SSMT. One of the first actions of the steering group will be to discuss and agree the roadmap for harmonising ICT systems across both Councils. This will need to take into account current software contracts, hardware limitations, user licences and user training in order to agree migration plans for each duplicated system, and will also be dependent upon IT resource usage and availability. The benefits of this would include:
- a. The development of a closer ICT working relationship between the leadership teams of both Councils;
 - b. Improved control over all aspects of ICT, including budgets, project delivery and alignment with Council strategy;
 - c. Improved ability to deliver the benefits of ICT harmonisation, including:
 - 1. Reduced ICT costs including software licences and support;
 - 2. Reduced ICT costs through better management of ICT procurement;
 - 3. Improved ICT performance through reduced complexity;
 - 4. Improved ability to integrate or share ICT services with other organisations;
 - 5. Improved ICT flexibility and agility.
- 6.2.5 This recommendation may incur some external costs to support the implementation of the ICT steering group. These are not expected to be more than £5k. Given that the Councils are already planning to harmonise the ICT applications, no further internal or external costs associated with implementing this option are expected.
- 6.2.6 **Recommendation 3: ICT service delivery:** Implement ITIL-based process to cover all service delivery activities. This option is likely to deliver a similar service in terms of quality to the

outsourcing approach, but will avoid any costs and other difficulties associated with role-guarantees, redundancy and TUPE. It will also ensure that the Council is well placed to take advantage of any of the government ICT initiatives such as G-cloud and the PSN without having to change contracts with a 3rd party.

- 6.2.7 It is then recommended that the Council review the implementation of this option after up to 24 months to ensure that services have improved in line with expectations. If they have not, an outsourced delivery of ICT services should be considered in order to ensure that they continue to meet requirements.
- 6.2.8 A successful internal implementation would allow the Councils to develop their skills as an organisation capable of delivering best practice ICT services, and will therefore put it in a good position to offer ICT services to other public sector organisations in the future. Other benefits include:
- a. More stable IT systems;
 - b. Quicker resolution of problems;
 - c. Improved communications between ICT and client services.
- 6.2.9 The anticipated cost of this option includes ICT resource to develop and implement new processes and external support for this. The expected costs are £60k for internal resource and £50k for external support.
- 6.2.10 **Recommendation 4: IS Architecture:** Audit the ICT infrastructure and implement a clear set of technology standards and a unified architecture framework. This includes:
- a. Consolidation of applications using the same technology: Continue to consolidate the operation of similar services which operate in different divisions to save maintenance and licensing costs, for example SQL databases and web content management. This will include moving all users in both Councils to thin client over time to enable this consolidation;
 - b. Virtualisation of hardware: Continue the use of virtualised servers and cloud computing to reduce hardware requirements;
 - c. Support and guidance: Provide support and guidance, through the formal and informal information sharing mechanisms, relating to the best use of the architecture.
- 6.2.11 It is also recommended that the Councils review the implementation of this option after up to 24 months to ensure that it is meeting their requirements. If this is not the case, outsourcing of the IS architecture provision should also be considered.
- 6.2.12 The likely benefits of this include:
- a. Improvements to the ICT service flexibility and response to business requirements;
 - b. Improvement in ICT efficiency;
 - c. Improved Management Information on ICT use;
 - d. Improved agility of ICT systems;
 - e. Easier ICT systems management;
 - f. Reduced ICT costs.

- 6.2.13 The implementation costs are expected to be approximately £150k to cover the provision of external contractors to implement these changes. Much of this could also be done internally if resource was made available.
- 6.2.14 **Recommendation 5: Performance management:** Create individual SLAs with all client services for all ICT services. This would mean that specific SLAs suited to the service being provided and the business unit’s requirements, e.g. for reliability and support would be discussed regularly with the Heads of Service to ensure quality of service and the provision of future capabilities. These SLAs should be in line with ITIL V3 best practice as this will ensure internal processes are in line with the industry standard. In addition, the current benchmarking activities should continue and the results widely communicated.
- 6.2.15 The expected benefits of this are:
- a. Improvements in the quality and business alignment of the ICT services;
 - b. Reduced support costs through closer alignment;
 - c. Improved customer satisfaction;
 - d. More predictable and controlled ICT costs.
- 6.2.16 It is expected that this will take approximately 25 days to deliver. If done externally the likely cost would be £10k.
- 6.2.17 **Recommendation 6: Flexible working:** Adopt enabling technologies and review options to enable applications for remote working. This will ensure that the council continues to provide flexibility for staff, members and the public around the use of IT systems and access to council information.
- 6.2.18 The expected benefits are:
- a. Increased flexibility for users leading to increased efficiency;
 - b. Potential office space savings based on hot-desking;
 - c. Improved public services based on improved response times and the ability to deliver services at locations convenient to the customer.
- 6.2.19 Costs for these technologies are difficult to predict as they vary greatly depending on the exact functionality needed. The costs for central hardware, software, user devices and training would need to be included.

6.3 Mapping between recommendations and key issues

6.3.1 Table 6.1 below maps the recommendations made to the key issues summarised in Section 4.4.

| Recommendation | Issues addressed |
|---|--|
| Recommendation 1: Address the current infrastructure risks and issues | <ul style="list-style-type: none"> • The current IT systems do not support common working • Lack of flexibility |
| Recommendation 2: Create an ICT steering group | <ul style="list-style-type: none"> • Lack of time for ICT governance • Client services make decisions in isolation • Disparate IT systems • Lack of IT architecture design and governance • Current systems do not support common |

| | |
|--|---|
| | working and processes <ul style="list-style-type: none"> • Lack of joined up ICT procurement |
| Recommendation 3: Implement ITIL based processes | <ul style="list-style-type: none"> • Client services make decisions in isolation • Lack of IT architecture design and governance • Lack of documentation • Lack of joined up ICT procurement • Lack of flexibility |
| Recommendation 4: Implement technology standards and an ICT architecture framework | <ul style="list-style-type: none"> • Disparate IT systems • Lack of integrated approach to data and information • Lack of IT architecture design and governance • Lack of documentation • Customers unable to get information needed • Current systems do not support common working and processes • Lack of flexibility |
| Recommendation 5: Create individual SLAs with Council departments | <ul style="list-style-type: none"> • Client services make decisions in isolation • Disparate IT systems • Lack of integrated approach to data and information • Lack of IT architecture design and governance • Lack of documentation • Current systems do not support common working and processes • Customers unable to get information needed • Lack of joined up ICT procurement • Lack of flexibility |
| Recommendation 6: Adopt additional enabling technologies | <ul style="list-style-type: none"> • Lack of flexibility |

Table 6.1: Mapping between recommendations and key issues

6.4 Outsourcing

6.4.1 If the Councils review the implementation of these recommendations as described above and conclude that an outsourced approach is required, the following should be considered as the best approach:

- a. The provision of IT infrastructure (including LAN) and common applications (e.g. Microsoft Office and thin client) should be provided by a single supplier;
- b. The WAN network connectivity should all be provided by a single supplier;
- c. A managed desktop service, including service desk, should be provided by a single supplier;
- d. The Councils should have a retained ICT team with responsibility for:
 1. Managing the relationship with ICT suppliers;
 2. Managing the Councils' element of ICT projects and changes;
 3. Supporting the business applications (e.g. Uniform);

4. Managing the relationship between ICT and client services, and advising on ICT strategy.

6.4.2 The minimum size of this retained team is likely to be eight staff, based on the current size of the team and a reduction in the number of business applications needing support.

6.5 Timeline

6.5.1 It is recommended that the tactical and strategic recommendations are implemented in parallel, beginning as soon as possible. This will ensure that the service to users is improved as quickly as possible, whilst also ensuring that once the service is improved a framework is in place to continue running the IT services effectively and to make improvements as needed. The time taken to implement these recommendations will also depend on the resources available to IT (i.e. whether a full complement of staff is recruited) and on the relative priority of these recommendations versus existing projects. These priorities will need to be set by the ICT steering group. Figure 6-1 below outlines the expected timeline for this implementation.

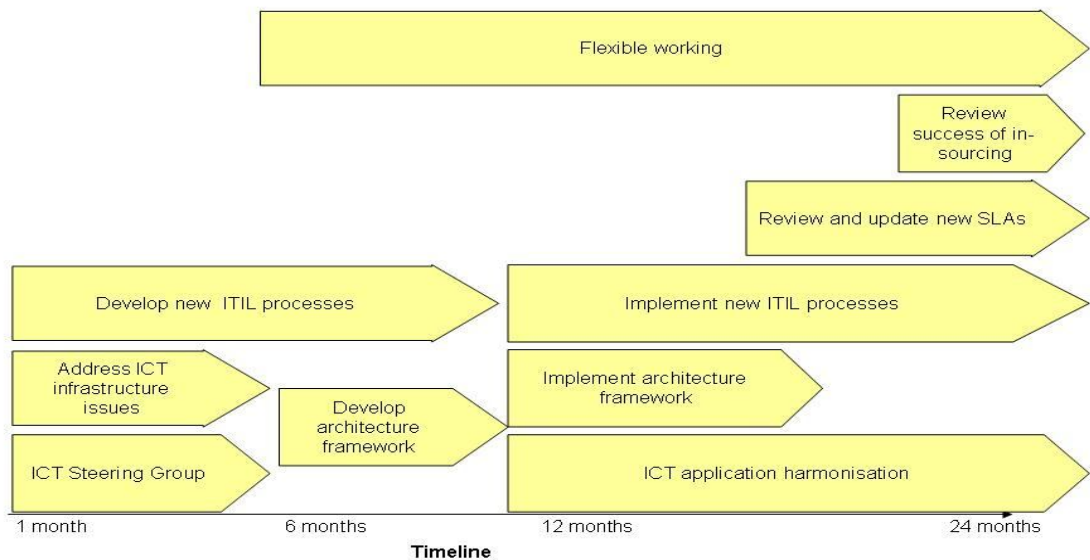


Figure 6-1: Strategy implementation timeline

6.6 Costs

6.6.1 The expected costs of implementing this strategy are listed in Table 6-2 below. These are all based on previous experience of implementing similar projects and include external resource costs.

| Capital Costs | Ongoing Costs |
|---|--|
| £5k external support for ICT steering group | £40k for extra ICT resource to develop processes |
| £50k external support for new ICT processes | |
| £10k for updated SLAs | |

| | |
|--|----------------------------|
| £150k for IS architecture improvements | |
| Totals | |
| £225k over 1 to 2 years | £40k p/a for up to 2 years |

Table 6-2: Strategy implementation costs

6.7 Benefits appraisal

6.7.1.1 This strategy document has identified the potential benefits of adopting the strategic recommendations. It is further recommended that the scope of the benefits be further quantified in order to develop a business case for the adoption of the strategy. A list of questions is presented below that will help to identify information that can be used to estimate the potential scale of any cost and time savings resulting from adoption of the strategy:

- a. How much time is currently spent by staff on work-arounds (e.g. finance spreadsheets, web payment management etc.)
- b. How much time is currently spent by management in finding and analysing Management Information?
- c. What were the aims, the project team size and the time taken for each project stage for the last 5 ICT projects across all divisions? Who was involved in the project teams?
- d. How much time is currently spent by ICT staff in responding to queries and requests for proactive support?
- e. What is the current total cost of external service provision and procurement?
- f. What are the current outage figures and the current cost to the business of services not meeting requirements?
- g. What are the opportunities for providing shared ICT services to other public sector organisations.

6.8 Risks

6.8.1.1 This section identifies the risks associated with non-implementation, and those associated with implementation of the proposed ICT strategy.

6.8.1.2 The risks associated with the Councils not implementing the strategy include:

- a. The Councils may not be able to meet their customers demands and expectations;
- b. The Councils may not be able to meet their long term business objectives;
- c. management information will be lacking in both quantity and quality which will be prejudicial to effective day to day management;
- d. the use of ICT resources will continue to be inefficient;
- e. The Councils will not benefit from new ICT developments;
- f. the level of success of the corporate plans will be significantly reduced;
- g. the need for the business to evolve into an organisation fit for the future will not be achieved.

6.8.1.3 The risks associated with implementation of the strategy include:

- a. inability to motivate staff to the benefits;
- b. staff resistance to change;
- c. the new processes may appear too complex for all staff to deal with;
- d. staff skills may not reflect the new procedures;
- e. training may not be focused to meet staff needs.

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A Terms of Reference for the ICT Steering Group

A.1 The proposed Terms of Reference for the ICT Steering Group are as follows:

- a. Information Systems
 1. To review annually and recommend to the board(s) amendments to the ICT strategy.
 2. To own and set standards, based on the strategic goals of the Councils, for the development of Council Information Systems.
 3. To keep informed of current Information Systems developments and best practice, and regularly review the standards in (2) against these.
 4. To review, in detail, all proposals to acquire or develop new systems to ensure that they meet the standards defined in (2) above to consider their impact on the current Information Systems and IT Operations and their expected cost and determine whether they should go ahead;
 5. To review all proposals to acquire or develop enhancements to existing systems in excess of £10k or 20 days effort; to consider the impact of such proposed systems on the current Information Systems and IT Operations and their expected cost and determine whether they should go ahead;
 6. To review any proposals for changes to the standards defined in (2) above made by the business areas to ensure that they are supportable within the Councils and meet the business area's requirements;
 7. To ensure that the Councils make best use of their existing Information Systems and expertise by encouraging or requiring business areas to work together on new developments or enhancements.
 8. To ensure the proper maintenance of the Corporate Systems Inventory.
 9. To ensure the preparation of a staff development programme as outlined in the ICT strategy and regularly monitor its effectiveness.
- b. IT Matters
 1. To consider individual IT initiatives by institutes, departments or activities not covered by (3) above and to ensure their cost effectiveness and that they pose no threat to the reliable and secure operation of the IT facilities.
 2. To approve and keep under review all council IT (information management) and web policies and procedures including: IT Infrastructure Security Policy; Software Policy; IT Project Approval Process; Approved Software List; Asset Management Procedure; IT Procurement Procedure; Standard Desktop Configuration; and PC Rollout.
- c. IT Operations
 1. To set standards, based on industry best practice and the requirements of both the councils' business areas and the public, for the management of the councils IT operations.
- d. General matters

1. Subject to the approval of the directors to establish sub-groups to carry out any of the functions listed above.

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B Stakeholder meeting questionnaire

B.1 The questions asked during the stakeholder interviews are listed below.

- a. What are the key roles of your Division within the Council, including provision of internal or external services?
- b. What IT services do you use to support these roles?
- c. Who provides, manages and maintains your IT services?
- d. What is good about your current IT provision, including the network, applications, support and hardware?
- e. What would you like to be improved about your current IT provision?
- f. What happens when things go wrong?
- g. Do you have any service documentation or service levels agreements relating to your IT provision?
- h. How much does your current IT provision cost – including maintenance, servicing etc. (if known)?
- i. What would you like your current IT service to do or provide which it does not?
- j. What changes to IT facilities are required to support your division's business strategy?
- k. What requirements do you have for service continuity and Disaster Recovery around IT services? Do you currently have any processes in place for this?

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C Data Collection

C.1 Introduction

C.1.1 This Appendix details the tools and methodology used for collecting the data on the current ICT infrastructure usage. It covers both the network data collection and the monitoring of the individual servers.

C.2 Tools used

C.2.1 PRTG Network Monitor

C.2.1.1 PRTG Network Monitor is an application which checks the availability and uptime of servers, computers, routers, switches, printers, etc., It can be used to monitor server load and performance and track bandwidth usage and network traffic. The application uses the Windows Management Interface (WMI) and Simple Network Management Protocol (SNMP) to collect information from a variety of devices. Detailed information about the health and performance of many different devices can be collected simultaneously and stored for later analysis and the evaluation of trends over time.

C.2.1.2 The PRTG application gathers information using a dedicated workstation with PRTG software installed on it. There is no requirement to install any client software on the devices being monitored. The PRTG workstation must be on the same network and PRTG Software must have the appropriate credentials configured for each of the devices being monitored.

C.2.1.3 The PRTG application was used to monitor and record the current performance and state characteristics of the servers used on the network. Only a Trial version of the PRTG Network Monitoring tool was installed to carry out the data capture for this period of analysis. Now that the licence has expired only a small number of devices can be monitored.

C.2.2 Orion Network Performance Monitor (Solar Winds)

C.2.2.1 The Orion Network Performance Monitoring application, produced by Solar Winds, monitors and analyzes real-time, in-depth, network performance statistics for routers, switches, wireless access points, servers, and any other SNMP-enabled devices. The application will periodically scan the network for changes and prompts administrators to monitor new devices. It supports drill down on a device-by-device basis and display of detailed system information on your network devices and servers. The Solar Winds application delivers alerts on real issues using advanced network alerting dependencies for correlated events, sustained conditions, and complex combinations of device states. The application is capable of monitoring a large number of devices and in addition to providing live information on current network metrics, will store historic information to allow the evaluation of trends and previous problems.

C.2.2.2 The Solar Winds application is installed on a server and like the PRTG application, does not require a client application to be installed on the devices being monitored. The application interfaces with AD to obtain the appropriate credentials required to communicate with the devices it needs to monitor.

C.2.2.3 The Orion Network Performance Monitor (Solar Winds) was used to monitor and record the current performance and state of the network equipment.

C.3 Server Monitoring

C.3.1 The PRTG application was used to gather a number of metrics covering the performance and status of the servers. Each metric is monitored using a software WMI 'sensor', on each device. The following types of WMI sensors were most commonly used to monitor the servers on the TRDC and WBC networks:

- a. CPU load (%): This sensor monitors the percentage of time that the processor is executing a non-idle thread. This is a primary indicator of processor activity. It is calculated by measuring the time that the processor spends executing the thread of the Idle process in each sample interval, and subtracting that value from 100 percent. High values may not necessarily be bad. However, if other processor-related counter are also increasing it may indicate a CPU bottlenecks.
- b. Memory Availability (%): This sensor monitors the amount of physical memory that is available to processes running on the computer. The Virtual Memory Manager continually adjusts the space used in physical memory (RAM) and on disk (HDD) to maintain a minimum amount of space for the operating system and processes.
- c. Pagefile Usage (%): This sensor monitors the amount pagefile used. The pagefile is virtual memory used by the computer. It is implemented using hard disk space for data that does not fit into physical memory (RAM). When a computer is using a lot of RAM for the operating system and its processes then the Memory Available will drop and there will generally be a corresponding increase in pagefile usage. Access to the pagefile is much slower than RAM and if users are remotely logged onto the machine then their desktop will become sluggish and intermittent.
- d. Page/Sec: High pagefile usage in itself is only an indicator of possible problems. The metrics monitored by the WMI sensors do not provide a definitive answer in many cases, but must be supplemented by other metrics to pinpoint or confirm a problem. The Page/Sec sensor records the rate at which pages of memory are written to, or read from, memory to satisfy hard page faults. Hard page faults occur when the data required by a process is no longer in memory (RAM) and needs to be read from disk (HDD). These kinds of faults cause system wide delays. High pagefile usage combined with high level of Page/Sec indicates a paging/lack of memory problem.
- e. Disk Free Space (%): This sensor monitors the available space on each of the hard disks used by the computer.
- f. Network Traffic (IN/OUT): This sensor monitors the traffic on the network adapter card. It determines the rate at which bytes are received/transmitted over each network adapter. The data is presented as Kilobits, Megabits or Gigabits per Second (Kbits/s, Mbit/s, Gbit/s). Network cards used by WBC and TRDC will have a capacity of 100 Mbit/s or 1 Gbit/s. Network cards are full duplex and can separately transmit and receive data at the specified capacity of the card. If there is saturation of the network interface then performance of the computer will be affected.
- g. Terminal Services: This sensor monitors the number of Terminal Services running on a server. Each terminal service corresponds to a single sessions (person logged in). In this case only the active sessions are being considered.

C.3.2 The following data items were collected from the servers every 1 minute:

- a. CPU load;
- b. Network traffic.
- c. Page/Sec.
- d. Terminal Services

C.3.3 The following data items were collected from the servers every 10 minutes:

- a. Memory availability;
- b. Pagefile usage;
- c. Disk free space.

C.4 Network Monitoring

C.4.1 Basic network monitoring was carried out using the PRTG application. This permitted the recording of network traffic in/out of each network card on a server. Further network monitoring was carried using the Solar Winds application. The Solar Winds application provides detailed statistics on network traffic for switches and routers. This provides a better overview of the overall network traffic flow, rather than a server centric view.

C.5 Data Collection

C.5.1 The following servers were monitored (grouped by domain):

- a. Watford Borough Council:

- 1. **WATFORDBC** domain (47 servers):

| | | | |
|--------------|----------------------|--------------|---------------|
| aptlvdb01726 | arclvap01722 | arclvap01728 | capsapp |
| capsdb | caxton | civlvdb01727 | frolvap01720 |
| frolvcn01717 | frolvcn01718 | froteap02075 | frotedb02076 |
| frotnap02073 | gisvap01737 | hersilias | idox |
| inflvap01723 | inflvts02802 | mssql2 | mssql3 |
| nightflight | pericles proxyserver | | remus |
| romulus | sca02851 | sterculias | tlctcap01725 |
| tlcvap01731 | ufiteap01724 | ufitnap01733 | virtualcentre |
| wbc02281 | ANILVSS02850 | APLLVWS0172 | APTLVWS02212 |
| CIVLVDB01727 | EROLVAP02804 | FROLVAP01720 | GISLVAP01737 |
| INFLVFS01712 | INFLVWS01736 | PECUNIA | PLUTOS |
| TLCLVAP01731 | TLCTEAP01725 | TOULVDB01730 | UFILVAP01719 |

- 2. **WBC** domain (32 servers):

| | | | |
|--------------|-------------|-------------|------------|
| anilvcs02849 | argus | ictdocs1 | plutostest |
| printlv02864 | rdp01 | rdp02 | rdp03 |
| rdp04 | rdp05 | rdp06 | rdp07 |
| rdptest2 | touchapp | touchdb | touchweb |
| watford_man1 | wbcpak001 | wdc1 | wdc2 |
| wqem | ACADWBCLIVE | ACADWBCTEST | CEDAPP |
| CEDDB | CEDOCR | CEDTEST | EXCLUS01 |
| EXCLUS02 | EXHUB01 | RDC1 | RDC2 |

- 3. **Watford DMZ** (2 servers):

martello redoubt courier

b. Three Rivers District Council:

1. **TRDCDOM1** domain (25 servers and 2 XP workstations):

| | | | |
|------------|--------------|-------------|-------------|
| trdclga10 | trdclga11 | trdclga12 | trdclga13 |
| trdclga14 | trdclga7 | trdclgas01 | trdclgas02 |
| trdclgcn01 | trdclgcn02 | trdclgdc01 | trdclgdc02 |
| trdclgfs01 | trdclgis02 | trdclgps01 | trdclgras1 |
| trdclgts01 | trdclgts01_2 | trdclgts03 | trdclgts04 |
| trdclgts05 | trdcsodc01 | trdctlclive | trdctlctest |
| trdexp350 | trdexp456 | trproxy | |

C.5.2 To monitor the main WAN connectivity links various different network switches were monitored on each domain.

D Glossary

| | |
|--------|---|
| BT | British Telecom |
| ICT | Information & Communications Technology |
| IP | Internet Protocol |
| LAN | Local Area Network |
| Mbit/s | Megabits per second |
| OWA | Outlook Web Access |
| QoS | Quality of Service |
| SLA | Service Level Agreement |
| TCP/IP | Transmission Control Protocol / Internet Protocol |
| VoIP | Voice over IP |
| VPN | Virtual Private Network |
| WAN | Wide Area Network |

Appendix - ICT outsourcing options

ACTICA/PB308D004 1.2

Watford Borough Council

Council

meetings; Government,

politics and public

administration; Local

government; Decision making

Executive Summary

This document presents the findings and recommendations arising from a strategic review of the outsourcing options for Information and Communications Technology (ICT) within Watford Borough Council and Three Rivers District Council (the Councils) undertaken by Actica Consulting Ltd.

In developing this strategy the key objectives for the consultancy team were:

- to define the key business objectives for ICT particularly in relation to current and future demands, and to confirm the business needs and directions;
- to identify the current portfolio of internal and external ICT service providers and what is being delivered;
- to identify the evaluation and selection criteria for options analysis;
- to identify the outsourcing options and select the optimum solution;
- to set out the action plan for proceeding with the current Councils ICT service to move to the selected solution;
- to use detailed benchmarking data to inform the ICT outsourcing options;
- to ensure that the ICT outsourcing preferred option supports the Council's transformation agenda

This options appraisal therefore reviews where the Councils are now, where it wants to be and then assesses a number of options in terms of the requirements for the outsourcing of the Councils' ICT service.

The approach used to deliver this options appraisal consisted of three phases: information gathering; analysis and reporting. The information gathering phase involved reviewing the information about the Councils ICT services gathered during the ICT review conducted by the same team in early 2011; holding discussions with a number of key ICT managed services suppliers on an anonymous basis; and holding discussions with Serco about their framework contract with Hertfordshire County Council.

Options

The options identified for outsourcing the Councils' ICT services are:

- Option 1: Do nothing;
- Option 2: Make additional investment in internal ICT team;
- Option 3: Outsource all ICT services using HCC agreement with Serco;
- Option 4;
 1. Option 4a: Outsource all ICT services;
 2. Option 4b: Outsource a specific set of ICT services;
 3. Option 4c: Outsource all ICT services, including hardware;
- Option 5: Public sector partnership.

Based on the information gathered during the previous ICT strategy work, the following option selection criteria were identified for the ICT Sourcing Strategy:

- It must be capable of delivering improved value for money for the ICT services that the Councils use, both initially and throughout the period covered by the outsourcing agreement – does the option mean that the Councils’ ICT costs will reduce?
- Satisfaction of requirements:
 1. It must be capable of providing the full range of current ICT services, as described in Section 2 – will the option deliver as a minimum a like-for-like set of ICT services?
 2. It must be capable of delivering continuous service improvements such as an improved ability for Council staff to remotely access services from remote and customer sites – will the option continue to improve the Councils ICT services and the experience of ICT customers over the life of the contract?
 3. It must be capable of delivering an improved ability for Council staff to work from home or from any Council office – will the option better enable Council staff to work remotely?
 4. It must be capable of delivering an improved ability to integrate and harmonise Line of Business applications – will the option better enable and reduce the timescales for application harmonisation?
 5. It must be capable of delivering an improved ability to work with partner organisations – will the option help ensure that the Councils’ ICT service uses the same or similar standards to other Public Sector organisations to enable integrated working as needed?
 6. It must be capable of supporting increased customer access to on-line transactional services – will the option help drive channel shift?
- It must be capable of delivering improved flexibility and agility, for example:
 4. improved ability to scale the volume of services provided up or down;
 5. improved ability to introduce changes to the services provided, rapidly if needed – how quickly and easily can the ICT services change to reflect updated or new business requirements?
- It must be procured and delivered in acceptable timescales – can the option be delivered in 18 months or less?
- It must be capable of driving and delivering an improved ability to innovate and transform, i.e. to rapidly identify and introduce new technologies, new market offerings, new processes, etc. that offer efficiency or effectiveness improvements to the Councils – will the option help drive continuing ICT service improvement and implementation of best practice?
- It must be capable of transitioning to and delivering the required ICT services at an acceptable level of risk – will the option subject the Councils ICT services to unacceptable levels of risk?

Analysis

The options analysis identified costs for each option, split into ongoing costs and transition costs. These are shown in the table below.

| | Option 1: Do nothing | Option 2: Internal investment | Option 3: HCC outsourcing | Option 4a: Outsource all ICT services | Option 4b: Outsource some ICT services | Option 4c: Outsource all including hardware |
|--|-------------------------------------|--|--|--|---|--|
|--|-------------------------------------|--|--|--|---|--|

| | | | | | | |
|------------------------------|------------|------------|------------|------------|------------|------------|
| Ongoing cost (annual) | £1,410,000 | £1,580,000 | £1,150,000 | £1,440,000 | £1,050,000 | £1,400,000 |
| Transition cost | £0 | £0 | £63,000 | £193,000 | £128,000 | £235,000 |

Options cost comparison

The analysis then reviewed and scored each option against the criteria to calculate a total score for each option that shows how well it meets the criteria. These scores are shown in the table below.

| | Option 1: Do nothing | Option 2: Internal investment | Option 3: HCC outsourcing | Option 4a: Outsource all ICT services | Option 4b: Outsource some ICT services | Option 4c: Outsource all including hardware |
|--------------------|-----------------------------|--------------------------------------|----------------------------------|--|---|--|
| Total score | 10 | 11 | 19 | 16 | 14 | 15 |

Options scoring

Conclusion and recommendation

The outcome of the options assessment in Section 4 is that Option 3: “Outsource all ICT services using HCC agreement with Serco” is the preferred option, primarily based on the value for money that it offers together with the likelihood that it will meet all of the Councils’ ICT requirements.

Option 1 is concluded not to be a viable option due to the cost and likelihood that the ICT service will increasingly fall behind in its ability to meet the Councils needs, particularly around flexibility. Option 2 is discounted because it fails to reduce the Councils ICT cost, and increases the budget requirement instead.

The options assessment scores for Options 4a and 4b which covered outsourcing to a different third party were close to the score for Option 3. However, it is likely that those options will take longer to implement than Option 3 due to the more involved procurement. Option 4b is additionally unlikely to be viable due to the likely lack of interest from quality third party suppliers based on the small size of the Councils managed service requirement under that option.

Option 4c is discounted due to the increased risk to the Councils of migrating both its ICT hardware and services – this increased risk is not justified by a suitably decreased cost.

Option 5 is discounted on the basis that this option is not likely to be delivered for a minimum of 24 months to allow for appropriate identification of potential partners, negotiations and procurement activities to take place.

It is therefore recommended that the Councils further explore Option 3 by gathering their ICT requirements, producing an ICT specification and allowing Serco to conduct a Full Business Case study and produce a costed proposal for delivering ICT services to the Councils that meet their requirements.

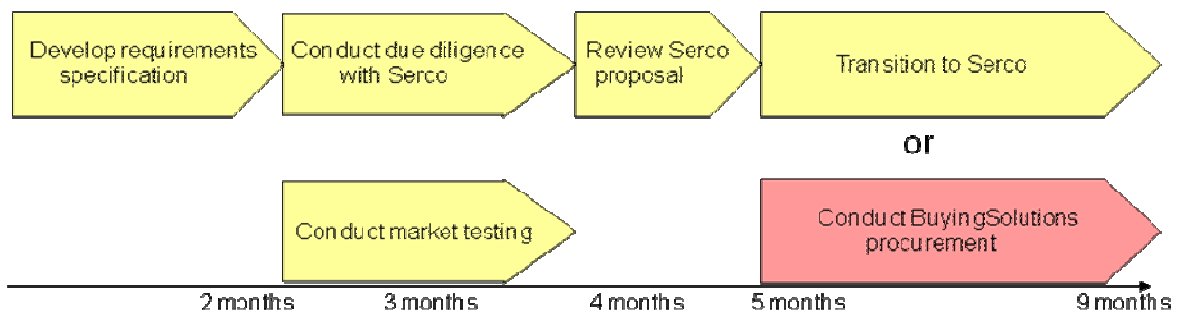
This proposal can then be reviewed by the Councils’ senior management teams and the Joint Committee in order to make a decision on outsourcing ICT services.

It is also recommended that the Councils discuss options around asset transfer with Serco if this Option is progressed. It is possible that total ICT costs to the Councils can be further reduced if the ICT supplier is able to make use of shared infrastructure and data centres to host the ICT services, and hence realise larger economies of scale for this service. It is difficult to say what impact this may have on ICT costs to the Councils as this stage as it would depend on what services Serco proposed.

It should be noted that the author has not yet had sight of the service catalogue that details the service that Serco provides to HCC, and is able to provide to the Councils. It is therefore assumed that these services are fit for purpose, this will need to be reviewed and confirmed for later versions of this report.

If this proposal fails to meet with the Councils requirements for any reason, it is recommended that the Councils proceed to implement Option 4a: Outsource all ICT services and runs a procurement through the BuyingSolutions framework in order to minimise any procurement delays. It should be noted that the relevant BuyingSolutions framework ends in August 2012 and so any procurement would need to be concluded before that date.

The figure below shows an indicative timeline for implementing ICT outsourcing and procuring ICT services to support the Councils. The timeline starts once the recommendation has been agreed by the Councils.



Timeline for ICT sourcing

The likely benefits of implementing this recommendation are:

- Lower total cost of ICT provision than current in-sourced service;
- Improved ICT service monitoring and reporting;
- Increased ability to innovate and improve ICT services;
- Increased visibility and transparency of ICT costs;
- Increased ICT flexibility through opportunities to make better use of hardware.
- reduced delivery timescales over other options.

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1 Introduction

1.1 General

1.1.1 This document presents the findings and recommendations arising from a strategic review of the outsourcing options for Information and Communications Technology (ICT) within Watford Borough Council and Three Rivers District Council (the Councils) undertaken by Actica Consulting Ltd.

1.2 Background

1.2.1 ICT refers to the technologies and services that enable information to be assessed, stored, processed, transformed, manipulated and disseminated, including the transmission or communication of voice, images and data.

1.2.2 WBC has always provided its own IT infrastructure and services, growing its ICT capability in line with demand. Its ICT servers are based at Watford Town Hall and the support team, originally also based in the Town Hall, is now split between there and the TRDC building, Three Rivers House.

1.2.3 TRDC has taken a different approach and has chosen to outsource its ICT requirements over the past ten years to a number of different suppliers. Most recently, the service has been provided by Steria, who took over the contract in 2005.

1.2.4 In November 2009, WBC and TRDC established a shared ICT service for both councils to provide a number of common applications. They are currently planning to continue to harmonise the ICT infrastructure and front-line applications in order to realise benefits such as:

- a. reduced costs;
- b. improved performance;
- c. increased resilience.

1.2.5 This shared service is fully in-house following the end of the TRDC contract with Steria in March 2010. It is based at TRDC under a single Head of Service, and provides the following services:

- a. operating a single helpdesk;
- b. implementing new IT projects including business process re-engineering;
- c. providing application administration, web development and IT implementations;
- d. managing the separate network infrastructures of each council.

1.2.6 The ICT shared service currently provides 36 applications to both Councils.

1.3 Corporate plans

1.3.1 Both councils have published corporate plans covering the next three to four years. These plans focus on the delivery of services to the public, the green agenda, safety and the environment.

The plans also maintain that the successful delivery of these strategic objectives is underpinned by council governance, the effective and efficient management of resources and by forming effective partnerships with other public sector organisations. The specific objectives of both councils are listed below.

Watford Borough Council

1.3.2 Watford Council's stated objectives are:

- a. Improve the health of the town and enhance its heritage;
- b. Enhance the town's 'clean and green' environment;
- c. Enhance the town's sustainability;
- d. Enhance the town's economic prosperity and potential;
- e. Supporting individuals and the community;
- f. Securing an efficient, effective, value for money council;
- g. Influence and partnership delivery.

Three Rivers District Council

1.3.3 Three Rivers stated objectives are:

- a. We will work with partners to make the district a safer place;
- b. We will provide a safe and healthy environment;
- c. We want to provide equal access to services and facilities for the public within the district and surrounding area and in particular address the needs of vulnerable residents such as elderly, disabled and young people;
- d. We want to maintain a high quality local environment and reduce the eco-footprint of the district;
- e. Customers – We will deliver our services to a standard that meets the needs and expectations of all of our customers;
- f. Governance – We will manage our resources to deliver our strategic priorities and service needs.

1.4 Objectives for the development of the ICT outsourcing options

1.4.1 This ICT Sourcing Strategy lays out how the Council's ICT components are procured, managed and run. The basic objective of ICT sourcing is to deliver the best level of support for business requirements in the most cost-effective way.

1.4.2 In developing this strategy the key objectives for the consultancy team were:

- a. to define the key business objectives for ICT particularly in relation to current and future demands, and to confirm the business needs and directions;
- b. to identify the current portfolio of internal and external ICT service providers and what is being delivered;
- c. to identify the evaluation and selection criteria for options analysis;
- d. to identify the outsourcing options and select the optimum solution;

- e. to set out the action plan for proceeding with the current Councils ICT service to move to the selected solution;
- f. to use detailed benchmarking data to inform the ICT outsourcing options;
- g. to ensure that the ICT outsourcing preferred option supports the Council's transformation agenda

1.4.3 This options appraisal therefore reviews where the Council is now, where it wants to be and then assesses a number of options in terms of the requirements for the outsourcing of the Councils' ICT service.

1.5 Approach

1.5.1 The approach used to deliver this options appraisal consisted of three phases: information gathering; analysis and reporting. The information gathering phase involved reviewing the information about the Councils ICT services gathered during the ICT review conducted by the same team in early 2011; holding discussions with a number of key ICT managed services suppliers on an anonymous basis; and holding discussions with Serco about their framework contract with Hertfordshire County Council.

1.5.2 The discussions with potential suppliers (except Serco) were held without revealing which organisation the Actica consultants were working for – the information given was that a local government organisation was looking at options around outsourcing their ICT provision and rough metrics were supplied. This was done to prevent prejudicing any future procurement.

1.5.3 Benchmarking was carried out through interviews and telephone conferences with other Local Authorities, using information from previous projects in addition to this work to provide as broad an information set as possible.

1.5.4 The analysis phase involved reviewing the information previously gathered from the Council and reviewing it to identify key issues and common themes. This information was then used to generate the high level requirements and other options assessment criteria. A number of options were then developed and assessed against the criteria, using the information from the supplier discussions to inform various elements including the likely costs.

1.5.5 The final reporting phase consists of delivering a draft version of this options document and then updating that to a final version which includes any comments made on the draft version by Council staff.

1.6 Document status

1.6.1 This is the final version of this document following review and comment by Council staff. It has been updated to include all comments received.

1.7 Document Structure

1.7.1 The remainder of this report is structured as follows:

- a. Section 2 details the current position with regards to the provision of ICT in the Council;
- b. Section 3 details the market analysis and benchmarking done to support this ICT outsourcing assessment;

- c. Section 4 identifies a number of possible ICT outsourcing options, assesses them against a set of criteria and identifies the preferred option;
- d. Section 5 presents the conclusions and recommendations from this work;
- e. Appendix A has a complete list of the assumptions used to generate the representative costs of each option;
- f. Appendix B contains the complete cost model for the options;
- g. Appendix C
- h. Appendix D
- i. Appendix E details the possible procurement options for the Councils.

2 Current Situation

2.1 Introduction

2.1.1 This section outlines the current situation for providing ICT services to the Councils.

2.2 Costs

2.2.1 The current cost for delivering ICT services to Watford and Three Rivers Councils are as follows:

- a. Operating costs (revenue) are approximately £1.4m p/a. This is split approximately 60/40 between Watford and Three Rivers respectively. This has been reduced from approximately £1.8m from 2010/11 due to the in-sourcing of the Three Rivers IT service from Steria. The major portion of this cost (circa £1m) is for employees;
- b. There is a capital investment of £190K in 2010 to fund the new SAN implementation, of £30K p/a for hardware replacement for the shared services and £70k p/a for hardware replacement for WBC. A budget for hardware replacement for TRDC has been requested for 2011/12 onwards.

2.3 Applications

2.3.1 The information systems that are used by both of the Councils can be split into three categories, namely:

- a. desktop PCs, with standard desktop applications and network connectivity (including internet access). There is a mixture of thin and thick client used to provide applications on desktop PCs;
- b. applications which are provided to both Councils as a shared service;
- c. applications which are hosted centrally and used by an individual Council. These could be supported by the ICT team or one of the Council client services.

2.3.2 Currently, the majority of the applications used by both Councils are managed and supported by the ICT team. A small number of applications e.g. Three Rivers Uniform are supported on a day to day basis by staff within the business areas rather than the ICT team. ICT provide regular additional support when required. There are also some applications hosted by external suppliers e.g. Atrium Property Asset Management, E-Petitions.

2.3.3 There are plans to harmonise applications across the two councils in order to reduce duplication. A roadmap for this is currently being produced.

2.4 Project management and business analysis

2.4.1 The Councils ICT team also includes a number of project management and business analysis staff who are responsible for managing ICT projects, and the ICT element of larger business change projects and programmes.

- 2.4.2 There are a significant number of projects proposed and taken forward by business services each year, these need to be prioritised in order to ensure that the ICT team is capable of delivering them within current resource levels. This prioritisation process is relatively new, and is owned and managed by the Joint ICT Steering Group, chaired by the Head of ICT.
- 2.4.3 This team also has a capability for limited in-house application development, including web development. These capabilities are used to support the business objectives as needed, and offer a reduced cost alternative to seeking third party application development support.
- 2.4.4 The application development, project and business analysis staff report to the ICT Business Manager, who reports to the Head of ICT. The IT Business Manager, Infrastructure Manager and Head of ICT share the responsibility of maintaining relationships between ICT and the Council business services.

2.5 Servers

- 2.5.1 The Councils have approximately 150 servers in total, housed across the three server rooms. They are primarily small Windows-based servers which are either mid-cycle or reaching end of life.
- 2.5.2 Currently, the majority of WBC business application servers are provided and supported on the basis of dedicated servers per application.
- 2.5.3 The majority of TRDC business application are provided on single servers, with multiple applications per server.

2.6 Network overview

- 2.6.1 The main Ethernet network used by the Councils' connects Watford Town Hall, Three Rivers House, Apsley and a number of other Council buildings. The network currently has sufficient bandwidth and performance to meet user requirements and can support Quality of Service (QoS).
- 2.6.2 The external network (WAN) includes a mixture of physical and wireless links as described in Figure 2-1 below.

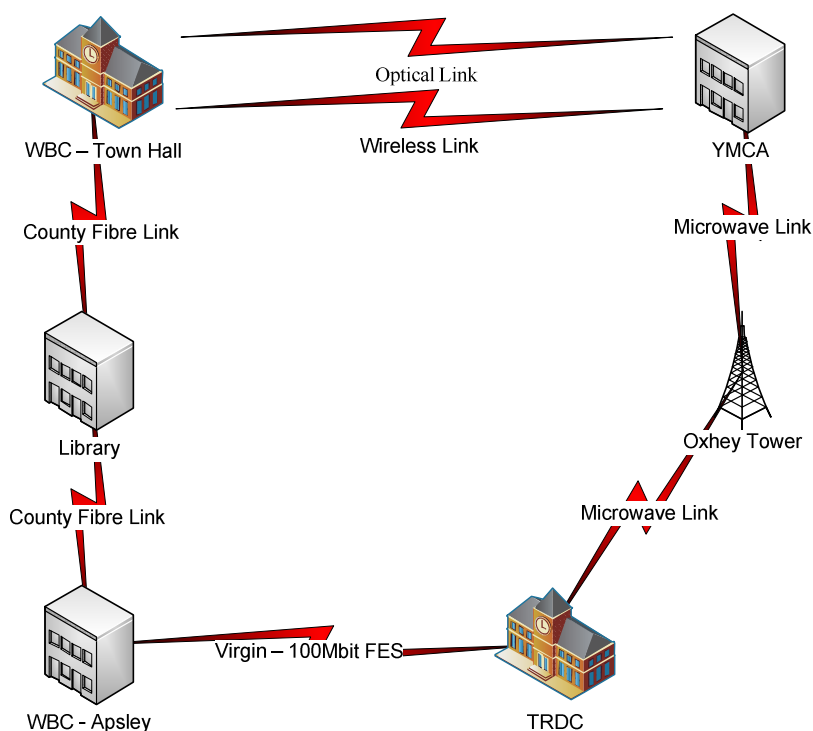


Figure 2-1: WBC and TRDC WAN connections

2.6.3 Provision is also made for wireless access to the network at a number of places in the Council building at Three Rivers.

2.6.4 There are three server rooms used by the Councils: dedicated rooms are in place at Watford Town Hall and Three Rivers House, and the Council makes use of the 3rd party data centre in Apsley for a number of the test servers and servers within the DMZ, until the Watford server room is relocated.

2.7 Desktops, laptops and printers

2.7.1 The Councils mainly use desktop PCs rather than laptops. There is no set or documented hardware refresh cycle for these, however the average age at replacement is approximately four years. There is a budget set aside for hardware replacement, but it is not currently used on a defined replacement cycle and there are no clear plans to do so. It is used on an ad-hoc needs basis, addressing issues when they arise.

2.7.2 The Councils also make use of a number of different printers, including black&white, colour and large format devices.

2.7.3 The provision of IT is underpinned by some generic Service Level Agreements (SLAs) for shared services and desktop services. The aim of these is to ensure that all client services and users get the same level of service for Desktop, and appropriate service levels for business applications.

2.8 Governance

- 2.8.1 The Councils' combined their IT governance as a result of the shared service initiative in 2009. An ICT strategy exists in the form of the ICT Service Plan. This is aligned to the strategic objectives of both Councils and is a detailed strategy that shows the costs and risks associated with the provision of ICT and details the projects and other improvements to be made over the strategy period.
- 2.8.2 ICT for both Councils is managed by a single Head of ICT who reports to the WBC Executive Director, and manages the IT teams that provide the ICT infrastructure, desktops, laptops and printers and both the shared and the individual applications.
- 2.8.3 The ICT structure changed in Jan 2011 such that the Head of ICT has three direct reports, an Infrastructure manager, a Service Desk manager and a Business manager. The Infrastructure manager is responsible for the day to day running and management of the ICT services provided to both Councils and to the public. The Service Desk manager is responsible for dealing with queries and problems reported by users, and for directing problems to the appropriate teams as needed. Previously the service desk role was the responsibility of the IT/Contracts Manager, with a high level of support required from the Business Team. The ICT Business manager is responsible for maintaining business systems and relationships between ICT and the Council client services, as well as for the delivery of ICT projects.

2.9 Service Provision

- 2.9.1 The ICT service is provided to both Councils by the ICT team that reports to the WBC Director. This team is based in Three Rivers House and has recently been restructured to include three teams – the infrastructure team, the service desk and the business team.
- 2.9.2 ICT service provision and performance is regularly discussed with the Heads of Service from both Councils by the Head of ICT. There are plans to formalise arrangements for these meetings and to share the responsibility between the Head of ICT, the ICT business team manager and the ICT infrastructure manager.
- 2.9.3 The Head of ICT reports to Leadership Team, Corporate Resource and Governance group, Shared Services Management Team, Joint Committee, Joint Management Board and on occasion TRDC Management Board.
- 2.9.4 The Head of ICT also chairs a regular Joint ICT Steering Group which is attended by many of the Councils' service heads and occasionally Council executives. The Joint ICT Steering Group is responsible for setting ICT technical standards, prioritising ICT projects and helping to develop Council ICT strategy.

3 What are other organisations doing?

3.1 Introduction

3.1.1 This section outlines the external situation in regards to Public Sector ICT outsourcing. Information has been gathered about Local Authorities to understand what they have been doing or are doing with regards to ICT outsourcing and from potential suppliers to understand what makes them interested in providing ICT services and how they might respond to any future procurement notices. Research was also undertaken on what other Public Sector partners were doing in terms of collaborative procurement for ICT.

3.2 Local Authorities Perspective

3.2.1 Local authorities within London employ a variety of approaches for the provision of their ICT services. For example, 23 London Boroughs recently took part in the annual SOCITM ICT Benchmarking study. This identified that 10 of the 23 participating boroughs used in-house staff to deliver their ICT services, while the remaining 13 participants outsourced all or part of the delivery of their ICT services.

3.2.2 In addition, outline details of the ICT provisioning for all of the London Boroughs shows that they all source their ICT services and applications from multiple vendors. Some elements such as Desktop provision and support are often combined and outsourced whilst others such as revenue and benefit systems are supplied by niche companies such as Northgate or SunGard.

3.2.3 As part of the development of this ICT outsourcing options study, information was gathered about a number of London Boroughs and other local authority bodies. These include the London Boroughs of Bromley, Lewisham, Greenwich, Hammersmith and Fulham, Newham and Enfield, and with Westminster City Council. The information gathered is discussed below.

Local Authority Feedback

3.2.4 All Local Authorities contacted, except for the London Borough of Newham, have outsourced ICT with all Authorities using a mix of providers for applications provision and support.

3.2.5 The desktop PC population across this group of Authorities ranges from 2500 up to 7000 units (compared to about 800 and 200 laptops across Watford and Three Rivers).

3.2.6 Internal ICT staff support numbers range from 2.5 in Hammersmith and Fulham to 80 in Hertfordshire. However, there does not seem to be a consistent way of counting ICT staff and the councils quoting the lowest numbers have not included staff spending some of their time on ICT related activities that are not within the IT department.

3.2.7 Bromley & Lewisham have recently undertaken a joint procurement with the following scope:

- a. Core ICT services (both Councils):
 1. Lot 1: Core IT services (Includes a prime contract/managing agent role for Lot 2);
 2. Lot 2: Voice and Data Networks;

-
- b. Data Centre services (Lewisham only);
 - c. Revenues & Benefits, Payroll & Pensions administration (Bromley only).
- 3.2.8 They have harmonised contract start dates and have agreed common specifications and contract documents. They have not undertaken to award joint contracts but are willing to consider shared services in the future.
- 3.2.9 Hammersmith and Fulham transferred all but 2.5 people from their IT department into a Joint Venture owned 80% by Agilysis and 20% by the Council five years ago. The joint venture either provides or manages all of the ICT services that the Council uses and also provides services such as application hosting and service desk provision for other public sector clients, including the London Borough of Kingston.
- 3.2.10 The London Borough of Enfield has awarded a five year contract to Serco to provide its ICT services, including transformation services. The Council has the option to extend the contract from 5 years to 9 years one year at a time. The contract has been developed so that other councils can use it to obtain ICT services on a framework basis, in a similar fashion to the Serco contract with Hertfordshire County Council. Several other London Boroughs are exploring the use of this framework, but they are at a relatively early stage. The contract and pricing is defined in terms of a number of detailed services to ensure cost transparency and includes a service credit regime to motivate the supplier. The definition of transformation services only relates to ICT transformation – for example the transformation services include migration from Lotus Notes to Exchange which in most other contexts would not be seen as a transformation service.
- 3.2.11 Westminster's current ICT services are provided by Capgemini who act as a sub contractor to Vertex who themselves run a number of the Council's services including;
- a. Contact Centres (the main one plus a dedicated one for Social Care);
 - b. One stop shops;
 - c. Reception and transport services;
 - d. Parking services (not the on-street staff).
- 3.2.12 Westminster has adopted an 'end user' computing model with Capgemini, which is based on a 'cost per user per annum' and is scalable up or down. The renegotiation has reduced the support charge from £3.25k per desktop to £1.5k per desktop. Their current contract with Vertex has a break/extend option in November 2012 and they would be keen to explore shared services with other Local Authorities.
- 3.2.13 All Local Authorities contacted would consider shared services if the business case justified it. All interviewed felt that future investment in ICT would have to be justified and that reviews of how to make better use of ICT and how to best procure ICT would continue to be a priority.

3.3 Other Public Sector Organisations

- 3.3.1 The majority of Public Sector organisations such as the Police, NHS and MoD procure their ICT through multiple suppliers with some elements being combined into lots.
- 3.3.2 The MoD outsources the majority of its ICT infrastructure, desktop and core applications provision to the ATLAS consortium under a Public Private Partnership (PPP) arrangement. Line of Business applications for activities such as command and control, intelligence and logistics

are sourced from best of breed suppliers. Communications are delivered via a number of separate PPP arrangements, and consultancy support is procured via a number of MoD consultancy frameworks.

- 3.3.3 The NHS has been undertaking a national programme called NPfIT to consolidate and share server architecture and applications across the whole of the NHS (although this programme has now been cancelled, the aspiration still exists, and is being more fully explored at a local level by individual Health Informatics Services).
- 3.3.4 The Police service has generally allowed each individual police force to procure its own ICT. A number are now looking at outsourcing, with Avon & Somerset Police combining their ICT provision with that of Somerset Council with a contract with IBM known as Southwest One. More recently the National Policing Improvement Agency (NPIA) has mandated that all new procurements will have to consider the potential of sharing that contract across all forces. So if one Police force wants to procure a managed desktop service then the contract has to be written in such a way that it would be possible for others to sign up to the same service without going out to tender, thus forming a framework agreement with the supplier.

Conclusion

- 3.3.5 Many Public Sector organisations have put in place contractual arrangements for ICT services that can be used by other Public Sector organisations, with the majority of all new tenders stating that they are open for other organisations to use. However, there is no registry or index of all of the available contracts, which means that it is very difficult to actually identify and use such contracts.

3.4 Suppliers

- 3.4.1 Actica have held discussions with the following companies over the last 18 months, specifically about the Councils requirements as well as other similar projects. They are representative of suppliers working in the local authority market:
- a. Agilysis;
 - b. Serco;
 - c. Capgemini;
 - d. Capita;
 - e. Fujitsu;
 - f. IBM;
 - g. Logica;
 - h. Northgate.

Supplier Feedback

- 3.4.2 It is not surprising that the general feedback from suppliers was that they preferred a standard OJEU tendering process with the opportunity to engage with the Council(s) during the pre tender phase, a well defined specification, coupled with an opportunity to refine solutions and service specifications during the procurement process. Serco advised that they would prefer to make use of their existing framework, but would be happy to respond to an OJEU should the Councils prefer to run a full procurement.

- 3.4.3 With the exception of Northgate, who do not have any large scale ICT outsourcing contracts, but possess a range of appropriate lines of business, the remainder preferred to act as a prime contractor with an ability to sub contract services that were not core to their own offerings. Equally, the general response was that the wider the service scope and the longer the contract length the better. The exception here was Northgate who liked the idea of bidding for individual lots/work packages with three year plus contract terms.
- 3.4.4 The main issue affecting the desired contract length was the amount of investment that the supplier was expected to make with regard to contract transition, transformation and ICT refresh.
- 3.4.5 Supplier views varied as to the volume/amount of risk that they were willing and/or expected to carry with regard to transformation programmes/projects:
- a. some suppliers expected full upfront payment for transformation projects with no indication of a success fee;
 - b. one company (Logica) was willing to consider a fee refund arrangement if forecast benefits did not materialise;
 - c. Northgate expressed a willingness to implement a payment profile over a period of three years as financial benefits were secured;
 - d. Agilysis would be happy to adopt a benefit sharing based approach where the benefits are clearly measurable and a good baseline exists.
- 3.4.6 A common theme was that if Councils expected a supplier to take financial risk on the delivery of transformation benefits then they must also be prepared to accept and implement recommendations from suppliers. Capita in particular expressed a strong interest in owning the end-to-end process so that it had full control that enabled it to deliver promised benefits/savings.
- 3.4.7 Further details on the procurement options available to the Councils are given in Appendix C.

Supplier Conclusion

- 3.4.8 Contract length:
- a. Minimum quoted 3+ years;
 - b. Middle ground 5+ years;
 - c. Ideal 7+ years.
- 3.4.9 Preferred Process:
- a. OJEU (Restricted Process) or Buying Solutions;
 - b. Serco would prefer to use their existing ICT framework with Herts County Council, but would be happy to bid against an OJEU if required;
 - c. Agilysis believed that with a single source prime contract with a large transformation element, a Competitive Dialogue approach would be necessary (this is unlikely to be the case with the Councils' requirements);
 - d. All wanted to engage pre tender;
 - e. All would like the opportunity to refine requirements via the process;

- f. All wanted contracts with gain share or bonus mechanisms¹ to motivate good performance, not just service credits or equivalent mechanisms to penalise poor performance.

3.4.10 It should be noted that the author has not yet had sight of the service catalogue that details the service that Serco provides to HCC, and is able to provide to the Councils. It is therefore assumed that these services are fit for purpose, this will need to be reviewed and confirmed for later versions of this report.

3.4.11 Scope:

- a. The larger companies (Agilysis, Serco, Capgemini, Capita, Fujitsu, IBM & Logica):
 1. would all like the contract to have the widest possible scope and the inclusion of front and back office solutions would be preferable;
 2. would be happy to include business process outsourcing (BPO) as part of the contract, i.e. taking full responsibility for core processes, including taking the existing staff via TUPE;
 3. would all like control of the end-to-end process, including transformation and like the idea of pre contracted days, although they would also be happy to provide consultancy on a call off basis;
 4. would prefer a single contract with the ability to subcontract non-core services;
 5. would not prioritise bidding for single elements such as desktop or datacentre contracts if there were alternative contracts to bid for with a wider scope;
- b. Northgate:
 1. are happy to bid for lots/work packages. This approach reflects their Line of Business structure and current positioning in the market;
 2. are happy to bid for business case led programmes/projects.

3.4.12 Attitude to Risk:

- a. The major companies expressed caution about the risk reward model where they are not controlling the end-to-end process;
- b. Logica seek consultancy led projects to underpin the lower margin core ICT business and given true partnership working are prepared to offer a 'cash-back/credit' regime when promised benefits are not forthcoming;
- c. Northgate appear to be prepared to take their consultancy transformation revenue over three years against delivered savings/benefits.

3.4.13 To deliver effective change programmes, there was general agreement that there should be:

- a. Joint boards;
- b. Joint implementation teams;
- c. Joint and shared risk registers.

¹ Gain shares and bonus mechanisms are often used to drive a suppliers approach to innovation and cost-reduction. Suppliers can be given a share of the benefits (amount of cost reduction) or an agreed bonus if a reduction in costs is achieved through work they have done or supported

- 3.4.14 The information obtained from the larger companies is consistent with the comment from Capgemini that they could not make their target level of margin on commodity services such as desktop support and data centre operations and therefore looked to make a higher margin on changes and transformation tasks. The Councils are likely to achieve greater flexibility and agility if one organisation provides the full set of ICT services required by the Councils (either including or excluding assets) as the relatively small size of the Councils' requirements mean that multi-sourcing is unlikely to be of interest to suppliers due to the very small margins available.

4 Options identification and assessment

4.1 Introduction

4.1.1 This section provides details on the individual options being considered for providing ICT services to Watford and Three Rivers Councils. It describes the assessment criteria for the options and then gives overview information on how well each option meets these criteria.

4.2 Options assessment criteria

4.2.1 Criteria

4.2.1.1 Based on the information gathered during the previous ICT strategy work, the following option selection criteria were identified for the ICT Sourcing Strategy:

- a. It must be capable of delivering improved value for money for the ICT services that the Councils use, both initially and throughout the period covered by the outsourcing agreement – does the option mean that the Councils' ICT costs will reduce?
- b. Satisfaction of requirements:
 1. It must be capable of providing the full range of current ICT services, as described in Section 2 – will the option deliver as a minimum an improved set of ICT services?
 2. It must be capable of delivering continuous service improvements such as an improved ability for Council staff to remotely access services from remote and customer sites – will the option continue to improve the Councils ICT services and customer experience over the life of the contract?
 3. It must be capable of delivering an improved ability for Council staff to work from home or from any Council office – will the option better enable Council staff to work remotely?
 4. It must be capable of delivering an improved ability to integrate and harmonise Line of Business applications – will the option better enable and reduce the timescales for application harmonisation?
 5. It must be capable of delivering an improved ability to work with partner organisations – will the option help ensure that the Councils' ICT service uses the same or similar standards to other Public Sector organisations to enable integrated working as needed?
 6. It must be capable of supporting increased customer access to on-line transactional services – will the option help drive channel shift?
- c. It must be capable of delivering improved flexibility and agility, for example:
 1. improved ability to scale the volume of services provided up or down;
 2. improved ability to introduce changes to the services provided, rapidly if needed – how quickly and easily can the ICT services change to reflect updated or new business requirements?

- d. It must be procured and delivered in acceptable timescales – can the option be delivered in 18 months or less?
- e. It must be capable of driving and delivering an improved ability to innovate and transform, i.e. to rapidly identify and introduce new technologies, new market offerings, new processes, etc. that offer efficiency or effectiveness improvements to the Councils – will the option help drive continuing ICT service improvement and implementation of best practice?
- f. It must be capable of transitioning to and delivering the required ICT services at an acceptable level of risk – will the option subject the Councils ICT services to unacceptable levels of risk?

4.2.1.2 While it is critical that any ICT outsourcing strategy delivers savings when compared on a like for like basis with the existing ICT arrangements, it should be noted that ICT is a key enabler to achieving value for money and effectiveness improvements across all Council services. For example, enabling Council staff to work while on the move offers the potential for significant productivity improvements in areas where Council staff engage with citizens and businesses in the community, such as Housing and Planning.

4.2.2 Option scoring

4.2.2.1 In order to identify a preferred option, the options presented below are individually scored against the assessment criteria so that their suitability can be quantified. The scores given for each element range between 0 and 3 where:

- a. 0 means that the option does not meet the criterion;
- b. 1 means that the option slightly meets the criterion;
- c. 2 means that the option mostly meets the criterion; and,
- d. 3 means that the option fully meets the criterion.

4.2.2.2 Generally, the higher the score the better that element meets the assessment criteria.

4.2.2.3 Table 4-2 consolidates the individual scores given to all of the options in order to total them and to identify the preferred option.

4.3 Identified options

4.3.1 The options identified for outsourcing the Councils' ICT services are:

- a. Option 1: Do nothing;
- b. Option 2: Make additional investment in internal ICT team;
- c. Option 3: Outsource all ICT services using HCC agreement with Serco;
- d. Option 4;
 - 1. Option 4a: Outsource all ICT services;
 - 2. Option 4b: Outsource a specific set of ICT services;
 - 3. Option 4c: Outsource all ICT services, including hardware;
- e. Option 5: Public sector partnership.

4.3.2 These options are further discussed and assessed in the remainder of this section.

4.4 Option 1: Do nothing

4.4.1 Summary

4.4.1.1 This option involves making no changes to the current arrangements for providing ICT services to both Councils. ICT will continue to be provided wholly by the ICT team based in TRDC, with support from 3rd parties bought in as needed.

4.4.2 Overall impact on the Councils

4.4.2.1 Option 1 would mean that the Councils continue to use their existing internal ICT team to deliver all ICT services to the Councils. This team would continue to implement the existing ICT change programme (focusing on back-ups, thin client hardware improvements and SAN implementations across both Councils).

4.4.2.2 The team would then need to continue implementing the recommendations made in the recent ICT review, including:

- a. Continuing to address the infrastructure risks;
- b. Improving relationships with the business;
- c. Implementing new ICT processes;
- d. Developing standards and guidelines for the ICT architecture and applications.

4.4.2.3 Users across both Councils would be likely to see gradual improvements to the current ICT services, such as speed and reliability improvements. It is also likely that ICT resources would continue to be stretched, particularly where changes to ICT services are required. The recently implemented Joint ICT Steering Group will continue to help manage the use of ICT and to prioritise ICT projects and this will need to be supported by improved ICT processes and improved ways of working between the Council ICT team and the Council business services and management teams. The current working relationships between ICT and the Council management will need some initial focus in order to ensure that they remain mutually supportive and focus on successful delivery of ICT services to the Council and to the public.

4.4.3 Benefits

4.4.3.1 There are few benefits of this option, the main benefit being that there is no cost or risk of transition to a new ICT arrangement. Additionally, existing ICT staff will not be affected by change and the Councils will not have to deal with any negative impacts of this.

4.4.3.2 This option would also mean that currently vacant posts in the Councils ICT team will be filled.

4.4.4 Requirements

4.4.4.1 This option is likely to meet some of the Councils' high-level requirements as listed above, in that it is already in place and delivering services to Council staff and other users. However, it is clear that the current arrangements struggle to meet the expectations of users around service and project delivery, for a variety of reasons.

4.4.4.2 This is likely to mean that the existing ICT service will continue to struggle to meet expectations, without a large investment in process change and hardware as proposed in the recent ICT review. It is likely that the gap between the requirements of the Council business services and the ability of ICT to deliver will widen over time.

4.4.4.3 Score = 1 due to low likelihood of being able to deliver change on a par with business requirements

4.4.5 Timescales

4.4.5.1 There are no timescales associated with the implementation of this option, as no changes are being made.

4.4.5.2 Score = 3 as this option is already in place so needs no time for delivery

4.4.6 Flexibility

4.4.6.1 This option will not significantly improve the flexibility of the current ICT arrangements as their management would not be fundamentally changed. However, it is noted that the ICT team is currently progressing a number of changes to the infrastructure that will have an impact on flexibility, and it is also expected that the Council will continue to implement the additional recommendations made in the recent ICT review under this option.

4.4.6.2 Score = 1 as the changes currently being implemented, together with the ongoing impact of the Joint ICT steering group will go some way towards helping improve flexibility.

4.4.7 Innovation

4.4.7.1 This option will not significantly improve the Councils' ability to innovate and make best use of ICT. It is noted that the current ICT team has capabilities in this area, and that the Council's now have governance in place to enable innovation to be discussed. These are reflected in the scoring.

4.4.7.2 Score = 1 due to the current technical competency of the ICT team and ongoing low level of engagement with the business areas to help discuss objectives.

4.4.8 Risks

4.4.8.1 The likely risks associated with this option are:

Ongoing risk

- a. The risk that the Council ICT team will not have the full support of the Council business staff resulting in ICT services not meeting requirements, or being poor value for money;
- b. The risk that Council ICT services will not keep pace with new technologies and public expectations due to the lack of resource available to support developments;
- c. The risk that the ICT budget has to rise in order to ensure that the ICT team is able to deliver and support a disparate set of ICT services;

Transition risk

- d. There is no transition risk associated with this option, as no step change occurs.

4.4.8.2 Score = 1 for ongoing risk as this option relies on the current levels of resource in the ICT team to identify issues and address them. It is likely that recruitment would be conducted to replace current temporary staff with permanent staff which would give more consistency and stability to the service, however the low levels of resource will continue to conflict with project requirements. There is therefore likely to be a continued risk to the ICT service.

4.4.8.3 Score = 3 for transition risk as no change is being made and hence no risk.

4.4.9 Costs

4.4.9.1 The costs for this option are based on the current ICT budget for the ICT shared service. These costs are detailed in Table 4-1.

4.5 Option 2: Make additional investment in internal ICT team

4.5.1 Summary

4.5.1.1 This option is similar to Option 1 in that the Councils' existing ICT team is retained to provide all ICT services. In this option, additional investment is made in the ICT team and the ICT infrastructure in order to ensure that resource levels in ICT are able to meet the demand for change from Council business services, and to invest in ICT hardware to ensure it is fit for purpose, flexible and scalable to meet any future requirements, including the provision of services to other public sector organisations.

4.5.1.2 It is recommended that the level of additional resources required under this option is:

- a. 3 more staff at level 7/8: 2 technical support and 1 project manager;
- b. An additional £50,000 per year investment in hardware.

4.5.2 Overall impact on the Councils

4.5.2.1 Implementation of this option would allow the Council to make best use of the existing human and technological resources whilst improving the areas that need attention to ensure that effective and efficient ICT services are delivered to all Council business services and to the public.

4.5.2.2 The Councils would see improvements in the way that ICT worked with the business services, leading to improved relationships and a more supportive partnership as a result of the improved processes and of the extra resource provision. The Councils would also see improvements to the quality of the ICT services delivered, in terms of access speeds, availability and potentially ease of use. These would result from the focus and spend on improvements to ICT hardware.

4.5.2.3 The Councils would also be likely to find it easier to request changes to existing ICT services and to implement new ICT services as a result of the improved relationships and improved ICT hardware which combine to bring greater flexibility to the ICT service provision.

4.5.2.4 One of the further advantages of this option is that the Councils would directly retain the existing ICT team and so staff would not need to get used to new ICT staff or have to spend time ensuring that a new ICT team fully understand their services and requirements.

4.5.2.5 Implementing this option would involve increasing the current ICT budget to support the increased resources – this is discussed further in the costs section below.

4.5.3 Benefits

4.5.3.1 The likely benefits of implementing this option are:

- a. Improved ICT service monitoring and reporting;
- b. Increased ability to innovate and improve ICT services;
- c. Potential for increased visibility and transparency of ICT costs;
- d. Increased ICT flexibility through opportunities to make better use of hardware.
- e. No significant contract management requirement;

4.5.4 Requirements

4.5.4.1 This option is likely to meet all of the Councils' high level requirements as identified in Section 4.2. These requirements depend on the ICT service being able to make use of best practice technologies and ICT processes and the increased ICT budget will enable the existing ICT team to procure and implement better technologies and spend time and resource on implementing best practice ICT management processes, possibly based on ITIL standards.

4.5.4.2 These changes, combined with the current ICT teams existing knowledge of the Councils business services and ICT infrastructure are likely to mean that the ICT service is able to meet the requirements of Council staff, members and the public.

4.5.4.3 Score = 2 as the improvements made to ICT services as a result of spend on the ICT hardware and resources will allow the ICT team to improve both relationships with the business and the adequacy of the ICT hardware and hence meet the majority of the Councils requirements. The score is reduced as the internal ICT team will not be able to take advantage of the experience and resources available to large ICT managed services vendors in order to identify and drive opportunities for innovation and change to improve services and reduce ICT cost.

4.5.5 Timescales

4.5.5.1 The timescales for this option are also based on the timescales detailed in the ICT review document. It is likely that this option will take up to 24 months to fully implement – driven mainly by the timescales for implementation of new processes and for developing and implementing a robust architecture framework. It is noted that some of the architecture framework design has already begun to support the SAN implementations, but it is also understood that no work has started on new ICT management processes for valid resource reasons.

4.5.5.2 Score = 1 as it is likely that a large proportion of the improvements could be delivered in reduced timescales on the basis that investment in the ICT services is made quickly, enabling the ICT team to start planning and implementing changes well in advance of any of the other options as no procurement is required. However, it is still anticipated that it will take 24 months until the ICT services delivered are on a par with an externally sourced option, which is outside the 18 month expectation.

4.5.6 Flexibility

4.5.6.1 This option will potentially provided increased flexibility and agility for the Councils' ICT systems, however this is dependent on the skills within the ICT team being appropriately used and managed in order to ensure that the architecture framework is fit for purpose and that the

hardware chosen is implemented and configured correctly – this may involve further training and or recruitment to ensure that the team has those skills.

4.5.6.2 The flexibility will also be dependent on successful relationships being created between the ICT team and both Councils' business service teams to ensure that they operate in partnership and that ICT is able to drive and advise business services use of ICT as well as align themselves with the business objectives.

4.5.6.3 Score = 2 as the improved ICT infrastructure and processes are likely to enable the Council teams to work closely together to make ICT plans, and improved architecture standards are likely to enable quicker and easier changes. The score is only marked down as the Council will not be able to take advantage of large scale ICT infrastructures in order to further improve flexibility through access to enterprise level hardware and infrastructure services.

4.5.7 Innovation

4.5.7.1 This option may improve the Councils' ability to innovate and make best use of ICT depending on what skills the new ICT resources have and how the new processes enable those to be used. It is likely that the ability to innovate and help improve services and lower costs will be higher than Option 1 due to the reduced pressure on resources.

4.5.7.2 Score = 2 due to the increased technical competency of the ICT team based on access to additional resources and likely improved level of engagement with the business areas to help discuss objectives.

4.5.8 Risks

4.5.8.1 The likely risks associated with this option are:

Ongoing risk

- a. The risk that the Council ICT team will not have the full support of the Council business staff resulting in ICT services not meeting requirements, or being poor value for money;
- b. The risk that Council ICT services will not keep pace with new technologies and public expectations due to the lack of resource available to support developments;
- c. The risk that increased ICT spend is not sustainable and that budgets and quality reduce over time;

Transition risk

- d. The risk that the changes to ICT hardware affect service due to migration issues;
- e. The risk that staff do not support improved ICT processes.

4.5.8.2 Score = 2 for ongoing risk as this option provides improved hardware and processes to enable support for ICT services to be better managed, including improved service monitoring and planning. The score is reduced due to the potential that the lack of ICT management change may mean that buy-in from all Council management stakeholders is not achieved and hence impacts ICT planning and management.

4.5.8.3 Score = 2 for transition risk as the ICT team is experienced in migrating services and no ICT management change is required.

4.5.9 Costs

4.5.9.1 The costs for this option are based on the recommendations made in the recent ICT review, with allowances made for work that is already been undertaken by the Council ICT team. These costs are detailed in Table 4-1.

4.6 Option 3: Outsource all ICT services using HCC agreement with Serco

4.6.1 Summary

4.6.1.1 This option involves Watford entering into a contract with Serco to make use of the framework contract already in place with Hertfordshire County Council for the provision of ICT support and management services. The Council would need to keep a small, retained layer of ICT staff in order to ensure that the ICT provider was easily able to liaise with the different council services, to manage the supplier and to help manage the Council services use of ICT. The Councils would also remain responsible for the provision of hardware.

4.6.2 Overall impact on the Councils

4.6.2.1 Implementation of this option would mean transferring responsibility for the management of the ICT infrastructure and applications to Serco. Ownership of the hardware would remain with the Councils and as such the infrastructure would remain in the Councils datacentres.

4.6.2.2 The Councils would need to retain some level of ICT team internally in order to manage the relationship with Serco, and to help manage the relationship between ICT and the Councils business services. The internal element would ensure that the ICT services retain a good understanding of the Councils business drivers and objectives, and would help to coordinate ICT requirements across all Council areas. It is anticipated that this retained layer would consist of three staff at management level. Further details on this are provided in Section 4.11 below.

4.6.2.3 The rest of the existing ICT would be given the opportunity to move into Serco under TUPE regulations, or may be offered redundancy or alternative positions within the Council if appropriate. The costs for this are factored in to this option.

4.6.2.4 The day-to-day management of ICT would then become the responsibility of Serco and they would expect their ICT service management staff to be invited to relevant Council meetings in order to ensure that ICT was properly engaged and to advise on ICT issues or possible changes as needed.

4.6.2.5 The Councils would need to continue to invest in desktop and server hardware to ensure supportability and to ensure that the hardware remained fit for purpose. The refresh cycle and investment required would be advised by Serco, and this would include support for the recommendations made in the recent ICT review.

4.6.2.6 It is likely that users would see quicker responses to ICT problems under this option, and also likely that the Council would be able to implement existing ICT strategy, such as application harmonisation, more quickly due to the increased resource that Serco would be able to provide to support these aims.

4.6.2.7 However, the Council would also need to recognise that implementation of this option would lead to a step change in ICT management processes, and that the Council management and business service heads would need to get used to a new way of working with ICT.

4.6.3 Benefits

4.6.3.1 The likely benefits of this option are:

- a. Lower total cost of ICT provision than current in-sourced service;
- b. Improved ICT service monitoring and reporting;
- c. Increased ability to innovate and improve ICT services;
- d. Increased visibility and transparency of ICT costs;
- e. Increased ICT flexibility through opportunities to make better use of hardware.
- f. reduced delivery timescales.

4.6.4 Requirements

4.6.4.1 This option is likely to meet the majority of the Councils' high-level requirements as identified in Section 4.2, based on the ability of Serco to deliver best-practice ICT services and experience in providing ICT services to local government. Serco have delivered similar services to HCC and to the London Borough of Enfield and, although both of these contracts are in their early stages, the indications are that the Councils are happy with the services to date. It is also clear that Serco has access to a wide range of experience in implementing technologies to support services such as remote working, and they have stated that they would look to use these to support the Councils requirements.

4.6.4.2 This adherence to the Councils ICT needs will need to be confirmed by clearly documenting the requirements and conducting a due-diligence exercise to confirm that the proposed ICT services will meet these detailed requirements.

4.6.4.3 This alignment between the ICT services and the Councils' requirements will need to be maintained through establishing a close partnership between the ICT supplier and Council management at all levels, and closely managing the relationship with regular meetings at management and executive levels.

4.6.4.4 Score = 3 based on Serco's documented abilities to deliver ICT services and specific references to meeting the Councils existing and future requirements in the current outline business case.

4.6.5 Timescales

4.6.5.1 The delivery timescales for this option are likely to be lower than those for an externally procured option as the Council is likely to be able to conduct a single supplier tender using the existing framework with HCC. This process would involve generating a requirements specification for the Councils ICT services and asking Serco to produce a full business case based on this specification – this would include detailed costs as a firm offer. If this offer is acceptable to the Councils contracts could be produced using the existing service catalogue and implementation could begin relatively quickly.

4.6.5.2 It is anticipated that this option could be delivered in 6 to 12 months from the start of the procurement.

4.6.5.3 Score = 3 on the basis that this option is likely to be quick to implement, well within the 18 month expectations.

4.6.6 Flexibility

- 4.6.6.1 This option is likely to improve the ICT flexibility through improved ICT management processes and improved relationships with the business services, leading to a better understanding of ICT and potentially better ICT planning. However, the existing ICT infrastructure will not change under this option, and this may still be a barrier to flexibility due to the legacy nature of the existing systems. There are ways in which the flexibility can be improved such as increasing the use of virtualisation and harmonising operating systems, but the infrastructure will always be a limiting factor.
- 4.6.6.2 Score = 2 as the flexibility of ICT will be improved, but not to the levels that could be attained if new hardware was implemented.

4.6.7 Innovation

- 4.6.7.1 This option is likely to improve the Councils access to innovations in ICT and improvements that can deliver better services to the public (directly or indirectly). This may also lead to future cost reductions.
- 4.6.7.2 The combination of Council knowledge from the retained layer, and knowledge and experience of ICT best practice provided by Serco should enable the Council to make good use of future developments in ICT if the relationship between ICT and Council business services is able to support that. This may still be impacted by the existing infrastructure in its ability to deliver quickly, but this option is likely to give greater access to skills and knowledge to support change in comparison to previous options.
- 4.6.7.3 Score = 3 based on ease of access to ICT best practice and Council business knowledge.

4.6.8 Risks

- 4.6.8.1 The likely risks associated with this option are:

Ongoing risk

- a. The risk that the Council retained ICT layer will not have the support of the Council business staff resulting in ICT services not meeting requirements, or being poor value for money;
- b. The risk that the Councils and ICT services provider do not work in partnership, resulting in ICT services not meeting requirements, being poor value for money, or leading to long delivery timescales;
- c. The risk that the contract value for money will decrease over time;
- d. The risk that effective change management is not conducted and that ICT customer expectations are not managed;
- e. The risk that the ICT outsourcing partner spends a disproportionate amount of time working with one of the Councils;
- f. The risk that ICT change may take longer due to different supplier change processes;
- g. The risk that the ICT management processes do not provide the correct level of engagement to easily support the Council as business requirements change;

Transition risk

- h. The risk of other potential suppliers questioning a single supplier tender, leading to difficulties in finalising the contract;
- i. The risk that the Councils do not know enough about their IT infrastructure or requirements to allow the supplier to accurately price the contract, resulting in unplanned increases or a reduction in service;
- j. The risk that important information about the current ICT services is not transferred to Serco on a timely basis, leading to problems during migration;
- k. The risk that transition takes longer than planned, leading to increased costs to the Council;
- l. The risk that Council staff leave rather than TUPE to the new provider, meaning that knowledge about the Councils applications and business services is lost.

4.6.8.2 Score = 3 for ongoing risk as Serco are likely to drive improvements to the ICT management processes, and are likely to manage the ICT services according to a risk-based industry best practice approach.

4.6.8.3 Score = 2 for transition risk as the change in ICT management and staff movement may lead to information gaps that lead to ICT service problems. It is not anticipated that the likelihood of this is high and so the score is still close to the maximum possible.

4.6.9 Costs

4.6.9.1 Costs for this option have been provided by Serco in a business case presentation, and have been discussed further with Serco to confirm their feasibility. These costs are presented in Table 4-1.

4.6.2 It should be noted that the author has not yet had sight of the service catalogue that details the service that Serco provides to HCC, and is able to provide to the Councils. It is therefore assumed that these services are fit for purpose, this will need to be reviewed and confirmed for later versions of this report.

4.7 Option 4: Outsource ICT services to a 3rd party

4.7.1 Summary

4.7.1.1 This option involves outsourcing ICT services to a 3rd party through an open procurement such as an OJEU or using the government BuyingSolutions frameworks. This option is divided into three sub-options: Option 4a looks at outsourcing all of the current ICT support services to 3rd parties; Option 4b looks at outsourcing some of the current ICT services to 3rd parties and Option 4c looks at outsourcing all ICT services, including hardware provision.

4.7.2 Option 4a: Outsource all ICT services

4.7.3 Summary

4.7.3.1 This option involves outsourcing all of the Councils ICT support services to a single provider. This is a similar option to Option 3, however the ICT provider would be procured through the normal procurement process rather than making use of the existing HCC framework.

4.7.3.2 These ICT support services could be procured through the existing BuyingSolutions IT Managed Services framework or could be procured via an OJEU should the Councils choose to involve more suppliers than those on the framework.

4.7.4 Overall impact on the Councils

4.7.4.1 Implementation of this option will have a very similar impact on the Councils to that of Option 3. The only differences are that the Councils will need to conduct a procurement process before a supplier can be selected – this is likely to involve setting up a procurement project and may impact on the already stretched ICT team, and the chosen supplier may have a different approach to TUPE costs to Serco and hence the transition team may need to spend time on these.

4.7.4.2 This option will also have the same requirement for a retained Council ICT team, as described in Section 4.11, and for continuing to invest in ICT hardware.

4.7.4.3 Once a supplier is selected, the transition and subsequent ongoing running of ICT services is likely to be very similar to that described in Option 3, except that the ICT managed service provider may be different.

4.7.5 Benefits

4.7.5.1 The likely benefits of this option are:

- a. Lower total cost of ICT provision than current in-sourced service;
- b. Improved ICT service monitoring and reporting;
- c. Increased ability to innovate and improve ICT services, including improved access to leading edge ICT services and technologies;
- d. Increased visibility and transparency of ICT costs;
- e. Increased infrastructure flexibility.

4.7.6 Requirements

4.7.6.1 This option is almost identical to Option 3, except for the procurement process, hence the end implementation is also likely to meet the majority of the Councils' high-level requirements as identified in Section 4.2, based on the ability of the chosen supplier to deliver best-practice ICT services and their documented adherence to the ICT specification developed for the procurement.

4.7.6.2 This alignment between the ICT services and the Councils' requirements will need to be maintained through establishing a close partnership between the ICT supplier and Council management at all levels, and closely managing the relationship with regular meetings at management and executive levels.

4.7.6.3 Score = 3 based on the chosen suppliers likely close match to the detailed requirements as presented in the ICT specification used for the procurement.

4.7.7 Timescales

4.7.7.1 The delivery timescales for this option include procurement and transition. The Councils are able to procure via the BuyingSolutions framework or via an OJEU.

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- 4.7.7.2 The likely timescale for a procurement via the BuyingSolutions framework is 3 to 6 months, and transition is likely to be 6 to 9 months.
- 4.7.7.3 The likely timescale for an OJEU procurement is 6 to 12 months, and the likely transition is also 6 to 9 months. Therefore the total timescale for implementation of this option is 9 to 21 months, based on the chosen procurement method.
- 4.7.7.4 Score = 2 as it is possible for the Council to procure and implement this option in relatively quick timescales, dependent on the procurement route chosen.

4.7.8 Flexibility

- 4.7.8.1 In common with Option 3, this option is likely to improve the ICT flexibility through improved ICT management processes and improved relationships with the business services, leading to a better understanding of ICT and potentially better ICT planning. However, the existing ICT infrastructure will not change under this option, and this may still be a barrier to flexibility due to the legacy nature of the existing systems. There are ways in which the flexibility can be improved such as increasing the use of virtualisation and harmonising operating systems, but the infrastructure will always be a limiting factor.
- 4.7.8.2 Score = 2 as the flexibility of ICT will be improved, but not to the levels that could be attained if new hardware was implemented.

4.7.9 Innovation

- 4.7.9.1 In common with Option 3, this option is likely to improve the Councils access to innovations in ICT and improvements that can deliver better services to the public (directly or indirectly). This may also lead to future cost reductions.
- 4.7.9.2 The combination of Council knowledge from the retained layer, and knowledge and experience of ICT best practice provided by the chosen supplier should enable the Council to make good use of future developments in ICT if the relationship between ICT and Council business services is able to support that. This may still be impacted by the existing infrastructure in its ability to deliver quickly, but this option is likely to give greater access to skills and knowledge to support change in comparison to previous options.
- 4.7.9.3 Score = 3 based on ease of access to ICT best practice and Council business knowledge.

4.7.10 Risks

- 4.7.10.1 The likely risks associated with this option are:
- Ongoing risk*
- a. The risk that the Council retained ICT layer will not have the support of the Council business staff resulting in ICT services not meeting requirements, or being poor value for money;
 - b. The risk that the contract value for money will decrease over time;
 - c. The risk that the Councils and ICT services provider do not work in partnership, resulting in ICT services not meeting requirements, being poor value for money, or leading to long delivery timescales;

- d. The risk that the ICT outsourcing partner spends a disproportionate amount of time working with one of the Councils;
- e. The risk that effective change management is not conducted and that ICT customer expectations are not managed;
- f. The risk that ICT change may take longer due to different supplier change processes;

Transition risk

- g. The risk that a limited number of suppliers bid for the contract given its relatively small size;
- h. The risk that the Councils do not know enough about their IT infrastructure or requirements to allow the supplier to accurately price the contract, resulting in unplanned increases or a reduction in service;
- i. The risk that important information about the current ICT services is not transferred to the new supplier on a timely basis, leading to problems during migration;
- j. The risk that transition takes longer than planned, leading to increased costs to the Council;
- k. The risk that Council staff leave rather than TUPE to the new provider, meaning that knowledge about the Councils applications and business services is lost.

4.7.10.2 Score = 3 for ongoing risk as the new supplier is likely to drive improvements to the ICT management processes, and are likely to manage the ICT services according to a risk-based industry best practice approach.

4.7.10.3 Score = 2 for transition risk as the change in ICT management and staff movement may lead to information gaps that lead to ICT service problems. It is not anticipated that the likelihood of this is high and so the score is still close to the maximum possible.

4.7.11 Costs

4.7.11.1 The costs for this option are based on publically available information on ICT providers commercial rates, BuyingSolutions rates and the authors' database of benchmarking information. These likely costs are presented in Table 4-1.

4.8 Option 4b: Outsource a specific set of ICT services

4.8.1 Summary

4.8.1.1 This option involves outsourcing some of the Councils' ICT services and retaining a number for continued delivery in-house. The outsourced ICT services would be split into elements, and some of these elements would then remain in-house rather than all of them going to tender.

4.8.1.2 The likelihood is that the Councils' would want to retain the in-house support for elements that are core to Council services, such as line of business applications. It is therefore assumed that, for this option, the Council would retain responsibility for:

- a. Line of business applications;
- b. First line helpdesk;
- c. 50% of project management requirement, acknowledging that the ICT outsourcing partner will also need to manage some of the ICT infrastructure elements;

d. Desktop support.

4.8.1.3 This option would be likely to be procured in the same way as Options 3a and 3c. However, it is also possible that the Councils' would be able to source a smaller service set from Serco using the HCC framework – this would need to be explored directly with Serco.

4.8.2 Overall impact on the Councils

4.8.2.1 The likely impact on the Councils of implementing this option is broadly similar to that of Options 3 and 4a. However, because of the services retained in the Councils ICT team the user impression would be closer to that of an in-house service rather than an outsourced capability. Users would contact Council staff to report issues rather than a third party helpdesk, and business service heads would speak mostly to Council ICT staff about ICT service and projects, rather than third party staff.

4.8.2.2 The Council would also retain responsibility for supporting applications, further removing the ICT managed service supplier from contact with the Council staff and other users.

4.8.2.3 This could be seen as a best of both worlds option, in that the ICT infrastructure would be supported externally and would benefit from best practice IT management processes but the ICT plans and strategies, as well as day to day management would remain the responsibility of the Council. This would mean that current relationships between ICT and the business would remain largely unchanged, and that the ICT management would have to take on different responsibilities around managing an outsourcing partner instead of managing hardware.

4.8.2.4 The Councils would need to continue to invest in desktop and server hardware to ensure supportability and to ensure that the hardware remained fit for purpose. The refresh cycle and investment required would be advised by the ICT outsourcing partner for servers and the internal ICT team for desktops. This would include support for the recommendations made in the recent ICT review.

4.8.2.5 The Council would have to retain their current ICT management team, and would also need to retain the majority of the application support staff and helpdesk staff in order to deliver this option. This would be likely to mean splitting the ICT team in order that some staff stayed with the Councils to deliver application support whilst others were given the option of transferring to the ICT outsourcing partner to help support the ICT infrastructure.

4.8.2.6 There would also be occasions where the third party supplier would need to attend Council management meetings, as in other options, in order to help deliver some key areas of the contract such as innovation.

4.8.3 Benefits

4.8.3.1 The likely benefits of this option are:

- a. Lower total cost of ICT provision than current in-sourced service;
- b. Increased helpdesk understanding of Council services and requirements;
- c. Increased visibility and transparency of ICT costs;
- d. Increased infrastructure flexibility.

4.8.4 Requirements

- 4.8.4.1 This option is likely to meet a number of the high level requirements identified above through making good use of the existing knowledge and skills of the Councils ICT team. These will help deliver continuity of service and help make sure that the ICT services are delivered according to the Council expectations.
- 4.8.4.2 However, the scale of the Councils ICT operations does not lend itself easily to a multi-supplier ICT service as described by this option, and there are likely to be a number of issues around managing the delivery of ICT, allocating actions and issues and project management responsibility. There may also be areas where projects cannot be delivered on time or to budget due to difficulties scoping the involvement of the Council and third party supplier.
- 4.8.4.3 It is likely that the Council ICT team will be able to forge a good working relationship with any supplier and so the likelihood of these problems occurring will reduce during the length of the contract, but this does mean that the option is less likely to meet requirements than a fully outsourced ICT managed service.
- 4.8.4.4 Score = 2 based on the likelihood that gaps in knowledge, skills or project scope may impact the delivery of ICT services.

4.8.5 Timescales

- 4.8.5.1 The delivery timescales for this option include procurement and transition. The Councils are able to procure via the BuyingSolutions framework or via an OJEU.
- 4.8.5.2 The likely timescale for a procurement via the BuyingSolutions framework is 3 to 6 months, and transition is likely to be 6 to 9 months.
- 4.8.5.3 The likely timescale for an OJEU procurement is 6 to 12 months, and the likely transition is also 6 to 9 months. Therefore the total timescale for implementation of this option is 9 to 21 months, based on the chosen procurement method.
- 4.8.5.4 Score = 2 as it is possible for the Council to procure and implement this option in relatively quick timescales, dependent on the procurement route chosen.

4.8.6 Flexibility

- 4.8.6.1 This option is likely to improve the ICT flexibility through improved ICT management processes due to the third party provision, but may not lead to improved relationships with the business services as the existing user-facing support services will stay in place. Additionally, the existing ICT infrastructure will not change under this option, and this may still be a barrier to flexibility due to the legacy nature of the existing systems as with the options above.
- 4.8.6.2 Score = 1 as the flexibility of ICT will be unlikely to be improved over the levels currently expected.

4.8.7 Innovation

- 4.8.7.1 In common with Option 3, this option is likely to improve the Councils access to infrastructure innovations in ICT which may lead to improved infrastructure provision and reduced costs.

-
- 4.8.7.2 It may prove difficult to implement any identified changes due to the disconnect between the ICT managed service supplier and the Councils executives, however this situation can be avoided if a good relationship is built between the third party management and Council executive teams with the support of the Councils ICT team.
- 4.8.7.3 It is likely that the Council will be able to benefit from changes to ICT management best practice, but will remain reliant on the internal ICT team and their resources to make best use of ICT infrastructure changes to deliver applications. This dual responsibility will need to be well managed to ensure that innovation can be utilised as effectively as in the previous options.
- 4.8.7.4 Score = 2 based on ease of access to ICT best practice and Council business knowledge, but potential implementation difficulties.

4.8.8 Risks

- 4.8.8.1 The risks associated with this option are:

Ongoing risk

- a. The risk that the Council retained ICT layer will not have the support of the Council business staff resulting in ICT services not meeting requirements, or being poor value for money;
- b. The risk that the Council staff will not be able to work effectively with the third party staff, or that processes do not integrate effectively;
- c. The risk that the Councils and ICT services provider do not work in partnership at a management level, resulting in ICT services not meeting requirements, being poor value for money, or leading to long delivery timescales;
- d. The risk that effective change management is not conducted and that ICT customer expectations are not managed;
- e. The risk that the ICT outsourcing partner spends a disproportionate amount of time working with one of the Councils;
- f. The risk that ICT change may take longer due to different supplier change processes;

Transition risk

- g. The risk that the Councils do not know enough about their IT infrastructure or requirements to allow the supplier to accurately price the contract, resulting in unplanned increases or a reduction in service;
 - h. The risk that transition takes longer than planned, leading to increased costs to the Council;
 - i. The risk that relevant Council staff leave rather than TUPE to the new provider, meaning that knowledge about the Councils applications and business services is lost.
- 4.8.8.2 Score = 2 for ongoing risk on the basis that it is more difficult to integrate ICT services provided by two separate organisations. This presents a more risky service than a single, integrated provision.
- 4.8.8.3 Score = 3 for transition risk as the risk is lower than the other sub-options here as less of the ICT service is being migrated.

4.8.9 Costs

4.8.9.1 The costs for this option are based on publicly available information on ICT providers commercial rates, BuyingSolutions rates, information from the authors' benchmarking database, and on the current Councils ICT services costs. These likely costs are presented in Table 4-1.

4.9 Option 4c: Outsource all ICT services, including hardware**4.9.1 Summary**

4.9.1.1 This option involves outsourcing all of the Councils ICT support and hardware provision services to a single provider. This would mean transferring the assets to the ICT provider and allowing them to fully support and manage all aspects of ICT provision to the Councils.

4.9.1.2 These ICT support services could be procured through the existing BuyingSolutions IT Managed Services framework or could be procured via an OJEU should the Councils choose to involve more suppliers than those on the framework.

4.9.2 Overall impact on the Councils

4.9.2.1 Implementation of this option would mean transferring responsibility for the management and provision of the ICT infrastructure and applications to a third party through a procurement. Ownership of the hardware would be transferred away from the Councils and as such the infrastructure is likely to eventually be transferred to the third party's datacentres.

4.9.2.2 The Councils would also need to retain some level of ICT team internally in order to manage the relationship with the third party, and to help manage the relationship between ICT and the Councils business services. The internal element would ensure that the ICT services retain a good understanding of the Councils business drivers and objectives, and would help to coordinate ICT requirements across all Council areas. It is anticipated that the retained layer for this option would also consist of three staff at management level. This team is described further in Section 4.11.

4.9.2.3 The rest of the existing ICT would be given the opportunity to move into the third party under TUPE regulations, or may be offered redundancy or alternative positions within the Councils if appropriate. The costs for this are factored in to this option.

4.9.2.4 The day-to-day management of ICT, including hardware, networks, platforms, desktops and laptops and applications would then become the responsibility of the selected third party and in common with other options they would expect their ICT service management staff to be invited to relevant Council meetings in order to ensure that ICT was properly engaged and to advise on ICT issues or possible changes as needed.

4.9.2.5 The Councils would not need to continue to invest in desktop and server hardware to ensure supportability and to ensure that the hardware remained fit for purpose as this would be included in the ICT outsourcing contract. However, some investment to support the recommendations made in the recent ICT review may be required during the transition period.

4.9.2.6 It is likely that users would see quicker responses to ICT problems under this option, and also likely that the Councils would be able to implement existing ICT strategy, such as application harmonisation, more quickly due to the increased resource that the third party would be able to

provide to support these aims. This may be improved further due to the agility that will be available on the new infrastructure.

4.9.2.7 The Councils will also be likely to see a changed approach to ICT projects driven by the new ICT hardware arrangements. This will provide additional opportunities to Council business services due to the increased flexibility and agility of the infrastructure, but may also mean that costs of provision are more transparent and thus business services may find that their ICT costs associated with projects change.

4.9.2.8 This option would mean that the Councils no longer have any direct responsibility for ICT, just to manage the contract with the third party and to work with them to drive and support the best practice use of ICT across the Councils. However, the Councils would also need to recognise that implementation of this option would lead to a step change in ICT management processes, and that the Councils management and business service heads would need to get used to a new way of working with ICT.

4.9.2.9 It is likely that the ICT assets would be transferred over a longer period than the initial transition. The third party is likely to take over management and ownership of the Councils current ICT infrastructure initially, and move ICT services across to its own ICT infrastructure and datacentres as opportunities present themselves due to service change or hardware going end of life.

4.9.3 Benefits

4.9.3.1 The likely benefits of this option are:

- a. Lower total cost of ICT provision than current in-sourced service;
- b. Improved ICT service monitoring and reporting;
- c. Increased ability to innovate and improve ICT services, including improved access to leading edge ICT services and technologies;
- d. Increased visibility and transparency of ICT costs;
- e. Increased infrastructure flexibility and agility;
- f. Increased resilience.

4.9.4 Requirements

4.9.4.1 This option is similar to Options 3 and 4a, except that the service provided also includes supply of all ICT hardware such as servers, storage, printers, desktops and laptops. This means that the end implementation is also likely to meet all of the Councils' high-level requirements as identified in Section 4.2, based on the ability of the chosen supplier to deliver best-practice ICT services and their documented adherence to the ICT specification developed for the procurement. The additional provision of hardware will give the Councils more scope to provision ICT services according to individual business service requirements, and to change quickly as needed.

4.9.4.2 This alignment between the ICT services and the Councils' requirements will still need to be maintained through establishing a close partnership between the ICT supplier and Council management at all levels, and closely managing the relationship with regular meetings at management and executive levels.

4.9.4.3 Score = 3 based on the chosen suppliers likely close match to the detailed requirements as presented in the ICT specification used for the procurement.

4.9.5 Timescales

4.9.5.1 The delivery timescales for this option include procurement and transition. The Councils are able to procure via the BuyingSolutions framework or via an OJEU.

4.9.5.2 The likely timescale for a procurement via the BuyingSolutions framework is 3 to 6 months, and transition is likely to be 6 to 12 months.

4.9.5.3 The likely timescale for an OJEU procurement is 6 to 12 months, and the likely transition is also 6 to 12 months. Therefore the total timescale for implementation of this option is 9 to 24 months, based on the chosen procurement method.

4.9.5.4 Score = 1 as it is possible for the Councils to procure this option in relatively quick timescales, dependent on the procurement route chosen, however the implementation is likely to take longer than other options because the ICT hardware is also being changed.

4.9.6 Flexibility

4.9.6.1 In common with Options 3 and 4a, this option is likely to improve the ICT flexibility through improved ICT management processes and improved relationships with the business services, leading to a better understanding of ICT and potentially better ICT planning. However, this option will also provide access to a larger infrastructure, most likely provided from a shared datacentre with access to a large number and variety of enterprise ICT hardware solutions.

4.9.6.2 This will allow the Councils to take advantage of ICT infrastructure and platforms being delivered as a service, and the flexibility and agility that this provides.

4.9.6.3 Score = 3 as the flexibility of ICT will be improved, allowing the Councils to make use of flexible and agile ICT infrastructure and application services.

4.9.7 Innovation

4.9.7.1 This option is also likely to improve the Councils access to innovations in ICT and improvements that can deliver better services to the public (directly or indirectly). This may also lead to future cost reductions.

4.9.7.2 The combination of Council knowledge from the retained layer, and knowledge and experience of ICT best practice provided by the chosen supplier should enable the Councils to make good use of future developments in ICT if the relationship between ICT and Council business services is able to support that.

4.9.7.3 Score = 3 based on ease of access to ICT best practice and Council business knowledge.

4.9.8 Risks

4.9.8.1 The likely risks associated with this option are:

Ongoing risk

- a. The risk that the Councils retained ICT layer will not have the support of the Councils business staff resulting in ICT services not meeting requirements, or being poor value for money;
- b. The risk that the contract value for money will decrease over time if infrastructure provision costs decrease but this saving is not passed on to the Councils;
- c. The risk that costs increase as the Councils business services look to make more changes or use additional functionality available on the new infrastructure;
- d. The risk that the ICT outsourcing partner spends a disproportionate amount of time working with one of the Councils;
- e. The risk that effective change management is not conducted and that ICT customer expectations are not managed;
- f. The risk that the Councils and ICT services provider do not work in partnership, resulting in ICT services not meeting requirements, being poor value for money, or leading to long delivery timescales;
- g. The risk that ICT changes may take longer due to different supplier change processes;
- h. The risk that the new infrastructure does not provide to be suitable for all Council applications, increasing costs;
- i. The risk that the Councils have to continue paying for their existing datacentre facilities for some time, adding to the total cost of ICT;

Transition risk

- j. The risk that the Councils do not know enough about their IT infrastructure or requirements to allow the supplier to accurately price the contract, resulting in unplanned increases or a reduction in service;
- k. The risk that important information about the current ICT services is not transferred to the new supplier on a timely basis, leading to problems during migration;
- l. The risk that transition takes longer than planned, leading to increased costs to the Councils;
- m. The risk that Council staff leave rather than TUPE to the new provider, meaning that knowledge about the Councils applications and business services is lost.
- n. The risk that existing services do not port easily on to the new infrastructure, increasing timescales and potentially affecting the delivery of ICT services.

4.9.8.2 Score = 3 for ongoing risk as this option means that the entire ICT services will be provided by a third party under clear service targets, and operating best practice ICT management processes.

4.9.8.3 Score = 1 for transition risk as this option requires the largest amount of change to the Councils existing ICT infrastructure and services. A large change such as this is likely to lead to higher risk than the previous options.

4.9.9 Costs

4.9.9.1 The costs for this option are based on publicly available information on ICT providers commercial rates, BuyingSolutions rates and information from the authors' benchmarking database. These likely costs are presented in Table 4-1.

4.10 Option 5: Public sector partnership

4.10.1 Summary

4.10.1.1 This option involves the Councils looking for other Public Sector organisations to partner with for the procurement or delivery of ICT services. This would either involve the Councils joining with the other Public Sector Organisation to undertake a joint procurement for ICT services, or agreeing with another Public Sector Organisation or Organisations that they will form a customer / supplier relationship and one will provide ICT services to the other(s).

4.10.2 Requirements

4.10.2.1 This option is likely to meet the Councils' requirements for ICT services as the delivery will be very similar to either Option 4a or Option 4c. However, this option is not likely to meet the requirements for delivery timescales as discussed below.

4.10.3 Timescales

4.10.3.1 This option is likely to take the longest to deliver as the Councils will need to identify and hold discussions with other Public Sector Organisations and form an agreement with any identified partners before proceeding to procurement. This procurement is then likely to follow the timescales identified in Option 4.

4.10.3.2 The total timescale for this option is therefore likely to be 18 to 33 months if the Councils allow 6 to 12 months to identify and form an agreement with other Public Sector Organisations.

4.10.4 Conclusion for Option 5

4.10.4.1 On the basis that this option is not likely to be delivered for a minimum of 24 months to allow for appropriate identification of potential partners, negotiations and procurement activities to take place, it is excluded from further analysis.

4.11 Retained layer

4.11.1 The Councils are likely to require an ICT retained layer (client function) for all of the outsourcing options in order to effectively manage the relationship with the supplier, and the ICT relationship with the Councils business services. The inclusion of this team is in line with current outsourcing best practice, in both the public and private sectors.

4.11.2 It is anticipated that this team will consist of three management-level staff – a Chief Information Officer (CIO) and two ICT relationship managers. This is based on the current ICT team structure where there are three managers who are responsible for managing the overall relationship with the business services. This number also allows the team to be split easily between the two Councils, with one relationship manager allocated to each Council and the CIO reporting to both management teams equally.

4.11.3 The CIO is broadly equivalent to the existing Head of ICT but ideally would be at an executive level. The CIO would have overall responsibility for setting ICT strategy for the Councils, for managing the relationship with the ICT outsourcing partner and for procurement of ICT hardware (as needed depending on the outsourcing option chosen). Responsibilities would include influencing executives and heads of service to help harmonise ICT requirements,

liaising with the ICT outsourcing partner to ensure that they understand and are aligned with Council business strategy and continuing to review the ICT outsourcing value for money.

- 4.11.4 The two ICT relationship managers would be responsible for managing relationships with the Council heads of service on a day to day basis, for ICT project management activities and for managing ICT service improvements in conjunction with the ICT outsourcing partner.
- 4.11.5 The cost for this team is based on the current pay scale for two band 10 employees and one executive level, including on costs.
- 4.11.6 The proposed team structure is shown in Figure 4-1 below.

Figure 4-1: Retained layer structure

- 4.11.7 Example job descriptions for the CIO and ICT relationship managers are given in Appendices C and D respectively.
- 4.11.8 If the Councils do not put this team in place, reducing the Councils ICT team to either one resource to manage the ICT contract or no resources, then the likelihood is that the ICT requirements of the Councils and the ICT services as delivered by the ICT outsourcing partner will start to diverge, and costs start to increase. This will be due to the suppliers level of knowledge of Council operations and requirements reducing over time through a lack of drive to engage regularly and positively with Council service teams, and potentially due to a lack of resource.

4.12 Cost comparison

- 4.12.1 Table 4-1 below presents detail on the likely costs of all options. These costs are based on publically available information such as BuyingSolutions frameworks, on information provided by Serco to WBC and TRDC and on costs of other similar procurements conducted by the authors of this document. At this stage these costs are likely to be accurate to +/- 50% on the basis that a detailed specification has not been provided to any potential suppliers and hence the costs are theoretical based on available information. More accurate costs will be generated through conducting procurement and/or market testing with suppliers based on a detailed specification.
- 4.12.2 Detailed information on the assumptions used to generate these costs is given in Annex A.
- 4.12.3 The costs are split into transition costs and ongoing costs in order to easily compare the likely initial investment requirement and the ongoing cost separately.

| | Option 1: Do nothing | Option 2: Internal investment | Option 3: HCC outsourcing | Option 4a: Outsource all ICT services | Option 4b: Outsource some ICT services | Option 4c: Outsource all including hardware |
|------------------------------|---------------------------------|--|--------------------------------------|--|---|--|
| Ongoing cost (annual) | £1,410,000 | £1,580,000 | £1,150,000 | £1,440,000 | £1,050,000 | £1,400,000 |

| | | | | | | |
|------------------------|----|----|---------|----------|----------|----------|
| Transition cost | £0 | £0 | £63,000 | £193,000 | £128,000 | £235,000 |
|------------------------|----|----|---------|----------|----------|----------|

Table 4-1: Options cost comparison

4.13 Options assessment

4.13.1 Table 4-2 below presents a consolidated view of the scores assigned to the assessment criteria for each option. These are then totalled to present an overall view of the quality of each option, and hence identify a preferred option.

| | Option 1: Do nothing | Option 2: Internal investment | Option 3: HCC outsourcing | Option 4a: Outsource all ICT services | Option 4b: Outsource some ICT services | Option 4c: Outsource all including hardware |
|---|-----------------------------|--------------------------------------|----------------------------------|--|---|--|
| Ability to meet requirements | 1 | 2 | 3 | 3 | 2 | 3 |
| Timescales | 3 | 1 | 3 | 2 | 2 | 1 |
| Improves flexibility | 1 | 2 | 2 | 2 | 1 | 3 |
| Innovation | 1 | 2 | 3 | 3 | 2 | 3 |
| Ongoing risk | 1 | 2 | 3 | 3 | 2 | 3 |
| Transition Risk | 3 | 2 | 2 | 2 | 3 | 1 |
| Cost reduction (value for money) | 0 | 0 | 3 | 1 | 2 | 1 |
| Total score | 10 | 11 | 19 | 16 | 14 | 15 |

Table 4-2: Options scoring

4.13.2 It can be seen from Table 4-2 that the highest scoring option is Option 3: Outsource all ICT services using HCC agreement with Serco.

4.13.3 It should be noted that this model awards equal weighing to each identified criterion – this is recommended as the most suitable model for ensuring that a balanced assessment is made where business requirements are given equal priority over cost.

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5 Conclusion and Recommendation

5.1 Introduction

5.1.1 This section details the conclusion reached through the analysis in the previous sections, and the recommendation made to the Councils. The recommendation includes a preferred option for outsourcing the Councils' ICT, a recommended action plan for implementing the preferred option and the likely benefits of implementation. This section also includes a number of further recommendations aimed at allowing the Councils to make best use of the ICT services included in the preferred option.

5.2 Conclusion

5.2.1 The outcome of the options assessment in Section 4 is that Option 3: "Outsource all ICT services using HCC agreement with Serco" is the preferred option, primarily based on the value for money that it offers together with the likelihood that it will meet all of the Councils' ICT requirements.

5.2.2 Option 1 is concluded not to be a viable option due to the cost and likelihood that the ICT service will increasingly fall behind in its ability to meet the Councils needs, particularly around flexibility. Option 2 is discounted because it fails to reduce the Councils ICT cost, and increases the budget requirement instead.

5.2.3 The options assessment scores for Options 4a and 4b which covered outsourcing to a different third party were close to the score for Option 3. However, it is likely that those options will take longer to implement than Option 3 due to the more involved procurement. Option 4b is additionally unlikely to be viable due to the likely lack of interest from quality third party suppliers based on the small size of the Councils managed service requirement under that option.

5.2.4 Option 4c is discounted due to the increased risk to the Councils of migrating both its ICT hardware and services – this increased risk is not justified by a suitably decreased cost.

5.3 Recommendation

5.3.1 It is recommended that the Councils further explore Option 3 by gathering their ICT requirements, producing an ICT specification and allowing Serco to conduct a Full Business Case study and produce a costed proposal for delivering ICT services to the Councils that meet their requirements. This should be conducted in parallel with a market testing exercise to ensure that the price offered by Serco is consistent or lower than equivalent providers. This would be done by sending the specification to all suppliers on the BuyingSolutions IT managed services framework and asking them to provide a guide figure for the price they would be likely to charge.

5.3.2 This proposal can then be reviewed by the Councils' senior management teams and the Joint Committee in order to make a decision on outsourcing ICT services.

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- 5.3.3 It is also recommended that the Councils discuss options around asset transfer with Serco if this Option is progressed. It is possible that total ICT costs to the Councils can be further reduced if the ICT supplier is able to make use of shared infrastructure and data centres to host the ICT services, and hence realise larger economies of scale for this service. It is difficult to say what impact this may have on ICT costs to the Councils as this stage as it would depend on what services Serco proposed.
- 5.3.4 It should be noted that the author has not yet had sight of the service catalogue that details the service that Serco provides to HCC, and is able to provide to the Councils. It is therefore assumed that these services are fit for purpose, this will need to be reviewed and confirmed for later versions of this report.
- 5.3.5 If this proposal fails to meet with the Councils requirements for any reason, it is recommended that the Councils proceed to implement Option 4a: Outsource all ICT services and runs a procurement through the BuyingSolutions framework in order to minimise any procurement delays. It should be noted that the relevant BuyingSolutions framework ends in August 2012 and so any procurement would need to be concluded before that date.

5.4 Action Plan

5.4.1 Overview

- 5.4.1.1 A widely used approach to ICT outsourcing involves treating it as a lifecycle, accepting that the ICT outsourcing approach is likely to change on a periodic basis. There are four phases in the lifecycle:
- a. Phase 1: Build the case for change;
 - b. Phase 2: Agree the outsourcing strategy;
 - c. Phase 3: Undertake procurement;
 - d. Phase 4: Transition and manage.
- 5.4.1.2 The progress to date and next steps for the Councils have been aligned to these phases in the following sections.

5.4.2 Phase 1: Build the case for change

- 5.4.2.1 The case for change needs to be based on showing whether the current ICT sourcing arrangements meet the future needs of the business. The ICT review report delivered in mid-2011 shows that the current ICT provision is not always meeting the needs of the Councils' departments in terms of cost, innovation, timeliness and partnership working. This is largely due to issues around available resource, governance and business relationships. Section 4 of this report outlines a number of benefits that may be realised through changing the approach to ICT sourcing and moving to an outsourced ICT provision.
- 5.4.2.2 A financial business case is also needed to support any change in ICT sourcing strategy, and a high level appraisal of the likely cost savings is presented later in this section. Further work, in the form of a due diligence exercise with Serco and some external market testing will be needed to confirm the financial case. These should be done as part of Phase 2.

5.4.3 Phase 2: Agree the outsourcing strategy

- 5.4.3.1 The procurement strategy for the preferred option is relatively simple as the Councils are able to take advantage of an existing framework contract. It is recommended that the Councils confirm that their procurement departments are happy that they can pursue a single supplier tender on this occasion.
- 5.4.3.2 The recommended next steps for completing the business case and agreeing the outsourcing strategy are:
- a. Complete detailed requirements gathering for each ICT service, across all services;
 - b. Develop a detailed output-based specification for the ICT service;
 - c. Complete a Full Business Case (due diligence) study with the proposed outsourcing partner (Serco);
 - d. Complete market testing with other potential suppliers, based on the detailed specification.
- 5.4.3.3 This information will then be used to confirm whether the preferred option represents value for money and to ensure that the services offered by Serco meet the requirements of the Councils.
- 5.4.3.4 It is understood that the Councils are likely to require some support for the procurement phase of this work to ensure that any procurement or due diligence is conducted appropriately and that it meets the Councils requirements.

Requirements specification approach

- 5.4.3.5 The requirements specification for the ICT managed service will be constructed based on the information gathered during the recent ICT review and through conducting new interviews with agreed Council executives and heads of service. These interviews will be based on an agreed questionnaire and will focus on elucidating the specific requirements for the Councils ICT service including:
- a. Governance arrangements;
 - b. Managed desktop requirements;
 - c. Managed application requirements;
 - d. Support service requirements;
 - e. Non-functional requirements.

Due Dilligence process

- 5.4.3.6 The aim of the due diligence process with Serco will be to ensure that Serco fully understands the Councils current ICT infrastructure, management processes and ongoing service requirements. This will be achieved through sharing Council ICT documentation with Serco and through Serco holding a number of interviews and workshops with Council staff to ensure they have all relevant information. Serco will also have been provided with the ICT requirements specification. The output from this process will be a Full Business Case written by Serco that details their ICT managed service proposal for the Councils, including accurate costs.

5.4.4 Phase 3: Undertake procurement

5.4.4.1 The Councils will need to undertake the procurement of their ICT services once the sourcing strategy has been agreed.

5.4.4.2 It is anticipated that the next steps required to manage and undertake this procurement are:

- a. Undertake contract discussions based on the outcome of the Full Business Case study, including agreement of:
 - 1. Transition timescales and costs;
 - 2. Business as usual costs and SLAs;
 - 3. TUPE arrangements;
 - 4. Council ICT staff roles and responsibilities;
 - 5. Support for innovation;
 - 6. Project roles and responsibilities;
 - 7. Project costs;
 - 8. Reporting arrangements;
 - 9. ICT hardware ownership.

5.4.5 Phase 4: Transition and manage

5.4.5.1 Once a contract for ICT services has been agreed the Councils will need to undertake a transition of ICT services to the new supplier. This is likely to involve:

- a. Transition planning including Council processes and possible structure change and TUPE;
- b. Setting in place ongoing operation and supplier/contract support processes;
- c. Maintaining awareness of technologies and local and national initiatives and projects that could impact the Council’s ICT provision, such as the PSN.

5.5 Indicative timeline

5.5.1 Figure 5-1 below shows an indicative timeline for implementing ICT outsourcing and procuring ICT services to support the Councils. The timeline starts once the recommendation has been agreed by the Councils.

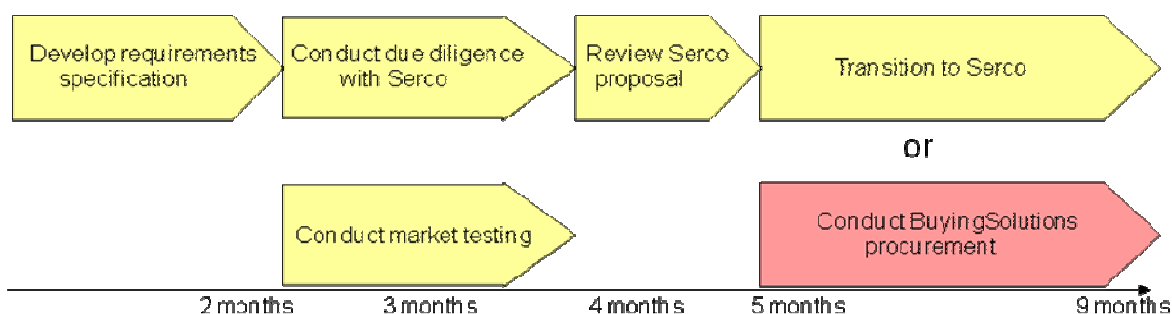


Figure 5-1: Timeline for ICT sourcing

5.6 Benefits

5.6.1 The likely benefits of implementing this recommendation are:

- a. Lower total cost of ICT provision than current in-sourced service;
- b. Improved ICT service monitoring and reporting;
- c. Increased ability to innovate and improve ICT services;
- d. Increased visibility and transparency of ICT costs;
- e. Increased ICT flexibility through opportunities to make better use of hardware.
- f. reduced delivery timescales over other options.

5.7 Costs

5.7.1 The likely costs associated with implementing the recommendations above are (to an accuracy of +/- 50% based on the current information available):

- a. Transition costs of £63,000;
- b. A potential cost of approximately £10,000 for Serco to produce the Full Business Case – this is only payable if the Councils do not proceed with the implementation;
- c. Ongoing ICT costs of £1.15m per annum.

5.8 Other recommendations

5.8.1 Exploiting outsourced contract to support and drive business change

5.8.1.1 Any outsourcing contract needs to be managed as a partnership in order to fully realise the benefits and ensure that the supplier is able to support the customers' business goals using their expertise. It is recommended that the opportunities that should be explored in the new ICT outsourcing process include:

- a. User access to authorised applications/functions from home and/or in-borough locations e.g. area offices, depots, etc;
- b. The development of mobile applications to integrate with applications used by front-line services;
- c. The integration of back end systems that facilitates single point of entry for mobile workers e.g. single sign-on;
- d. A secure communications infrastructure that allows professional users to access and update client records from remote locations;
- e. A secure communications infrastructure that allows application transactions to take place remotely;
- f. Extended help desk support both in time and the ability to support Council staff outside of the normal office environment.

5.8.1.2 These opportunities are likely to involve use of Council and IT outsourcing partner project resource to scope and deliver the changes, and hence are likely to be at additional cost to the base contract (subject to any inclusion of project days as discussed below).

5.8.2 Project days

5.8.2.1 It is recommended that the Councils look to procure a fixed amount of project days per year as part of the contract, reducing the cost of individual days against the published rates. The level of days required needs further discussion, but it is anticipated that a level of around 250 days per year will deliver a reasonable discount and also be low enough to ensure that they are used. This figure also assumes that the retained layer will conduct some of the project work currently done by the Councils ICT team.

5.8.3 Contracts

5.8.3.1 The majority of the ICT hardware support contracts held by the Councils have either already expired (and the hardware is supported on an ad-hoc basis) or will expire before the end of Q3, 2012. This aligns well with the likely timescales for procurement and implementation of an outsourcing solution, meaning that the Councils are unlikely to encounter difficulties with terminating or novating contracts.

5.8.3.2 It is recommended that the Councils do not enter into any further contracts or renewals until a decision regarding ICT outsourcing is made.

A Cost assumptions

A.1 Introduction

A.1.1 This annex details the information used to generate the costs associated with each option.

A.2 Assumptions

A.2.1 The scope of the ICT managed service provided in each option includes:

- a. 800 desktop and laptop PCs
- b. 150 resilient servers to host applications and databases
- c. 20Tb resilient data storage provided in a SAN environment
- d. Provision of a resilient WAN to link all relevant Council sites and the data centres, which will be an upgrade to the existing provision
- e. Provision of all helpdesk services
- f. Back-up services
- g. Disaster recovery provision
- h. Project support and delivery services

A.2.2 The retained layer for outsourced options includes 3 management level staff, 2 at band 10 and 1 at an executive level.

A.2.3 Existing ICT staff who are not part of the retained layer either TUPE across to outsourced provider, are found other positions in the Councils or are made redundant.

A.2.4 WBC and TRDC require a total of 250 project management days and 150 TDA/business analysis days per year from the outsourcing supplier. It is expected that the retained layer will undertake some of the project work currently undertaken by the ICT project and business analysis resources.

A.2.5 Pension strain or transfer costs are not included in the cost comparison as no numbers are currently available.

A.2.6 An equivalent of 4 FTE will be needed to support applications for Option 4a and 4c

A.2.7 The TUPE costs for Options 4a and 4c are based on an allowance of approximately 15% of total annual ICT salary bill for all staff below manager level (including on-costs of 30% of basic salary). This covers pay protection for staff moving to lower salary jobs (either in Council or TUPE to outsourced provider) and / or staff taking redundancy of 2.2 x statutory. This also assumes an average of 5 years service.

A.2.8 The TUPE costs for Option 4b are half those for Options 4a and 4b on the basis that 50% of the ICT staff will need some TUPE consideration and half are retained in the Councils.

-
- A.2.9 Project management costs based on the support for transition provided by Council staff are not included in the transition figures.
- A.2.10 Transition for Option 3 will take approximately 50 days of supplier time and includes an allowance of 10% of the server cost to cover any upgrade requirements.
- A.2.11 Transition for Option 4a will take approximately 60 days of supplier time and includes an allowance of 10% of the server cost to cover any upgrade requirements.
- A.2.12 Transition for Option 4b will take approximately 30 days of supplier time and includes an allowance of 10% of the server cost to cover any upgrade requirements.
- A.2.13 Transition for Option 4c will take approximately 120 days of supplier time and includes an allowance of 10% of the server cost to cover any upgrade requirements resulting from the ICT review recommendations.
- A.2.14 The infrastructure support cost for Options 4a and 4b based on 1 FTE per 40 servers for the platform and 4 FTE for applications = total of 8 FTE, at a rate of £50k p/a.
- A.2.15 Desktop support costs are calculated on a cost per call basis – industry average = approx £40 per call. Assume 800 users x average of 8 calls p/a (based on industry stats for non-expert users).
- A.2.16 The additional Council resource retained for Option 4b consists of 4 band 7 application support staff and 3 band 3 desktop support staff.
- A.2.17 Infrastructure platform costs for Options 3, 4a and 4b are based on the following refresh cycles:
- a. Servers replaced every 5 years
 - b. Desktops replaced every 4 years
 - c. SAN hardware replaced every 7 years – also includes a provision for disk replacement

B Detailed cost matrix

B.1 Attached below is a detailed cost matrix that shows how the costs in Section 4 were derived.

| | Option 1: Do nothing | Option 2: Additional internal investment | Option 3: Outsource using HCC agreement | Option 4a: Outsource all ICT support services | Option 4b: Outsource some support ICT services | Option 4c: Outsource all ICT incl hardware |
|---|---|---|--|--|---|---|
| Ongoing | | | | | | |
| Staff costs | £ 1,010,000 | £ 1,130,000 | £ 190,000 | £ 190,000 | £ 290,000 | £ 190,000 |
| Infrastructure | | | | | | |
| Support (maintenance of hardware) | included | Included in platform | £ 130,000 | £ 200,000 | £ 200,000 | included below |
| Platform (hardware) | £ 400,000 (currently supplies & services budget) | £ 450,000 As option 1 plus £50k investment | £ 180,000 | £ 180,000 | £ 180,000 | £ 60,000 |
| Storage | included | Included in platform | included | included | included | £ 30,000 |
| Helpdesk | included | Included in staff costs | included | included in desktop | included | included in desktop |
| Network | Included above | Included in platform | £ 25,000 | £ 40,000 | £ 35,000 | £ 40,000 |
| Software | | | | | | |

| | | | | | | |
|------------------------------------|----------------|-------------------------|----------------|-------------|-------------|----------------|
| Licences | Included above | Included in platform | £ 50,000 | £ 50,000 | £ 50,000 | £ 50,000 |
| Support | Included above | Included in staff costs | Included above | £ 200,000 | £ 50,000 | £ 200,000 |
| Desktop | | | | | | £ 600,000 |
| Support | Included above | Included in staff costs | £ 270,000 | £ 260,000 | included | |
| Hardware | Included above | Included in platform | £ 90,000 | £ 90,000 | £ 90,000 | Included above |
| Projects | | | | | | |
| Project mgmt | Included above | Included in staff costs | £ 138,500 | £ 150,000 | £ 75,000 | £ 150,000 |
| TDA / BA | Included above | Included in staff costs | £ 73,650 | £ 78,750 | £ 78,750 | £ 78,750 |
| Total Ongoing (yr 1) | £ 1,410,000 | £ 1,580,000 | £ 1,147,150 | £ 1,438,750 | £ 1,048,750 | £ 1,398,750 |
| Transition | | | | | | |
| Project management | £ - | £ - | £ 25,000 | £ 30,000 | £ 15,000 | £ 60,000 |
| TUPE (excluding pension transfer?) | £ - | £ - | £ - | £ 100,000 | £ 50,000 | £ 100,000 |
| Hardware | £ - | £ - | £ 13,000 | £ 13,000 | £ 13,000 | £ 15,000 |
| External support for procurement | £ - | £ - | £ 25,000 | £ 50,000 | £ 50,000 | £ 60,000 |
| Total Transition | £ - | £ - | £ 63,000 | £ 193,000 | £ 128,000 | £ 235,000 |

C Job Description for Chief Information Officer

C.1 Summary of Role

C.1.1 Implement and maintain ICT strategies, policies, programmes and schedules for ICT shared service including managed desktop provision, business application provision and data storage, computer services, network communications, and management information services to accomplish the Council's strategic aims and objectives.

C.1.2 Responsible for the relationship between the Councils and their ICT outsourcing partner(s).

C.2 Key Responsibilities

C.2.1 The key responsibilities of the role are:

- a. Ownership of the ICT strategy for the Councils, ensuring continued alignment with business needs and corporate strategy;
- b. Chairmanship of the Joint ICT Steering Committee;
- c. Responsible for managing the outsourcing partner that provides all ICT support infrastructure and data;
- d. Liaise with all Business Services across both Councils to deliver the ICT strategy;
- e. Responsible for development and delivery of ICT service plans which fully satisfy stakeholder needs with the Business Services;
- f. Overall responsibility for prioritising and delivering ICT projects, and ICT elements of larger Council projects;
- g. Engagement in Business Planning & Budget Forecasting;
- h. Manage the procurement of all ICT desktop and server infrastructure for the Councils;
- i. Management of the Councils retained ICT services team.

C.3 Key skills required

- a. Degree level qualification, ideally at Masters Level, and significant relevant work experience of developing and managing implementation of ICT strategies, preferably with Local Government;
- b. Significant operational responsibility within a technology environment;
- c. Significant experience of working on large scale projects in a senior project and programme management role;
- d. Programme and Project Management industry qualifications to Practitioner level (e.g. MSP, PRINCE 2, PMP);
- e. Liaising and influencing at board level.

C.4 Core Competencies:

- a. Changing with pace;

-
- b. Collaboration;
 - c. Delivering in partnership;
 - d. Making effective decisions;
 - e. Making things happen;
 - f. Leading and Influencing;

C.5 Role Specific Competencies

- a. Developing high performance;
- b. Thinking with vision;
- c. Delivering value for money;

C.6 Desirable skills of candidate

- a. ITIL service management principles;
- b. Ability to manage, communicate and develop working relationships with internal and external stakeholders;
- c. Experience of delivering business enabling processes in Local Government.

C.7 Reporting

- a. The Chief Information Officer will report to the boards and the Chief Executive / Manager Director of both Councils.

D Job Description for ICT Relationship Manager

D.1 Summary of Role

- D.1.1 To manage and support the alignment between ICT and the council business services, including advising on the best use of current ICT services, the development of new ICT services.
- D.1.2 To support the development and maintenance of a consolidated ICT strategy and service improvement plan for both councils.

D.2 Key Responsibilities

D.2.1 The key responsibilities of the role are:

- a. Day to day responsibility for the delivery and maintenance of the councils ICT applications to customer satisfaction, working with the ICT outsourcing partner;
- b. Liaison with business services across both councils to support the delivery and use of current ICT application capability;
- c. Liaison with business services across both councils to support the development of and planning for future ICT application capability;
- d. To support the development, maintenance and communication of a consolidated ICT strategy;
- e. Identification of opportunities for business process improvement utilising the ICT applications, including the provision of relevant management information;
- f. Management and delivery of approved ICT improvement projects;
- g. Engagement in ICT planning and budget forecasting for the business services;
- h. Support the Chief Information Officer in other roles, as required.

D.3 Key skills required

- a. Degree level qualification and a notable track-record of relevant work experience in consolidation and management of business information systems, preferably within the Local Government sector;
- b. Significant operational responsibility within a technology environment;
- c. Significant experience of working on large scale projects in a senior project and programme management role;
- d. Programme and Project Management industry qualifications to Practitioner level (e.g. MSP, PRINCE 2, and PMP).

D.4 Core Competencies:

- a. Changing with pace;
- b. Collaboration;
- c. Delivering in partnership;

-
- d. Making effective decisions;
 - e. Making things happen;
 - f. Leading and Influencing.

D.5 Role Specific Competencies

- a. Developing high performance;
- b. Thinking with vision;
- c. Delivering value for money.

D.6 Desirable skills of candidate

- a. ITIL service management principles;
- b. Ability to manage, communicate and develop working relationships with internal and external stakeholders;
- c. Experience of delivering business enabling processes in Local Government.

D.7 Reporting

- a. The ICT relationship managers will report to the Chief Information Officer, with dotted lines to the Chief Executive / Managing Director of both councils.

E Possible procurement mechanisms

E.1 Introduction

E.1.1 This section details the different procurement mechanisms that have been considered in this report. They cover all of the procurement routes available to Public Sector organisations for large contracts.

E.2 OJEU procurement options

E.2.1 It is a requirement of the EU Procurement Directive that all tenders for contracts for supplies and services in the Public Sector which are valued above a defined threshold must be published in the Official Journal (except where procured via an established framework). It is further required that the contracting authority should invite sufficient tenderers from the responders expressing interest in bidding to ensure adequate competition. For example the minimum number of candidate organisations to be invited to tender is three in the Competitive Dialogue Procedure and five in the Restricted Procedure.

E.2.2 **Procurement timescales:** Using the Buying Solutions contracting process, no statutory or other timescale obligations are imposed. Hence procurement timescales are defined only by practical considerations such as the time reasonably required for bidders to compose and submit a proper offer. Pursuing the OJEU route there are four award procedures as follows:

- a. **Open Procedure** – where a notice is placed in the Official Journal inviting applications which meet minimum criteria. All of those who meet these criteria must be sent an invitation to tender.
- b. **Restricted Procedure** – where the contracting authority may reduce the number of applicants selected to tender according to the procedures set out in the Directives.
- c. **Competitive Dialogue** – where, following an OJEU Contract Notice and a selection process, the authority enters into dialogue with potential bidders, to develop one or more suitable solutions for its requirements and on which chosen bidders will be invited to tender. This approach is generally considered to be ideal if the Contracting Authority does not have a clearly defined view of some aspect of the services to be provided and/or how they will be provided. Alternatively, it may be seeking to garner the best ideas from a number of bidders and thereafter capturing these in a common specification. This option can have a high cost for suppliers and for the customers if the areas to be negotiated are extensive. This approach can be made more cost effective if the areas of negotiation are tightly controlled.
- d. **Negotiated Procedure** – where the contracting authority may negotiate with one or more applicants, either via a tender or directly. In certain instances, the negotiated procedure is available without publishing a call for competition. However, its use is only available in very strictly defined and limited circumstances.

E.2.3 The legislation imposes minimum timescales as set out below to ensure that applicants are given a reasonable chance of making known their interest and of being able to submit a proper offer. It is important to remember that these are minimum periods. Generally speaking, where a requirement is complex or where there is a need for site visits or detailed negotiation of contract documents then additional time should be allowed. Note that the figures in brackets denote the

time allowed under the so-called ‘accelerated procedure’ whereby the contracting authority must make a valid case for the need to follow a fast track process.

| Procedure | Date of Despatch Notice | Tendering Period |
|-------------|-------------------------|------------------|
| Open | 52 (22) days | - |
| Restricted | 37 (15) days | 40 (10) days |
| Negotiated | 37 (15) days | Not specified |
| Competitive | 37 (15) days | Not specified |

Table C-1: OJEU Procurement timescales

E.2.4 The stages that make up these procedures include:

- a. OJEU notice;
- b. Pre-qualification questionnaire (PQQ);
- c. Select participants;
- d. Invitation to participate in dialogue;
- e. Dialogue phase (including number of solutions and bidders);
- f. Final tenders;
- g. Evaluation of tenders (including clarification, specification and fine tuning);
- h. Selection of preferred bidder and notification to PB and other bidders (commence 10 day standstill);
- i. PB clarification and confirmation of commitment;
- j. Award of contract;
- k. Desired receipt of services – phased as required.

E.3 Use of Framework contracts

E.3.1 Buying Solutions frameworks

E.3.1.1 Buying Solutions is the national procurement partner for UK public services and works collaboratively with other Professional Buying Organisations on a regional basis; it was formerly known as OGCbuying.solutions. Buying Solutions has now withdrawn the Catalist and Managed Services sub brands although it continues to be an Executive Agency of the Office of Government Commerce. It has established procurement framework agreements based on standard contractual terms and conditions. Framework agreements are therefore a set of pre-tendered contracts established with a range of suppliers in a variety of categories from which Public Sector customers can purchase goods and services in a relatively straightforward manner. These agreements comply with the EC Procurement Directives and contracting authorities are legitimately entitled to apply them by contracting directly as an alternative to following the full tendering and contracting requirements defined by the EC Directive.

E.3.1.2 The BuyingSolutions framework that could be used by the Council for its procurement is the IT Managed Services framework (RM717).

E.3.1.3 Suppliers on this framework are:

- a. 2e2 UK Ltd;
- b. Bull Information Systems Ltd;
- c. Capita Secure Information Systems;
- d. Centerprise International Ltd;
- e. Civica UK Ltd;
- f. Computacenter (UK) Ltd;
- g. Getronics UK Ltd;
- h. ICM;
- i. Logica UK Ltd;
- j. Northgate Information Systems UK Ltd;
- k. Specialist Computer Centres (SCC) plc;
- l. Steria Ltd.

E.3.2 HCC framework

- E.3.2.1 The Hampshire County Council framework for ICT services was implemented in early 2011 and is currently delivering an ICT managed service to HCC making use of their existing hardware and datacentres.
- E.3.2.2 The procurement of this ICT managed service included discussions with other public sector organisations, including WBC and TRDC to ensure that their high level requirements for ICT were understood and included in the specification for the framework.
- E.3.2.3 The result of this work is that WBC and TRDC are able to take advantage of the HCC framework to procure and deliver an ICT managed service that meets their requirement, potentially with reduced procurement timescales based on a single supplier tender.
- E.3.2.4 The author of this report has not had sight of the service catalogue that details the ICT services available through this framework and as such is not able to comment further on its specifics.

ICT Steering Group – TERMS OF REFERENCE

1. Introduction:

ICT Services and products are powerful enablers in bringing about the Council's strategic agenda and in helping to deliver efficient and effective council services. To maximise potential benefits, we need to align and prioritise ICT strategies, plans and resources with council corporate and service objectives and priorities

One of the key outcomes of the Actica Infrastructure review May 2011 made the recommendation to establish the Corporate ICT Steering Group (ITSG) to enhance joint planning arrangements between ICT and council services through an improved governance model.

This document describes the current and possible future scope and working arrangements for the corporate ICT steering group

2. Scope:

- Ensure ICT is genuinely business driven and helps deliver corporate and service objectives
- Understand and manage the relationships, risks, dependencies and cross-cutting implications between major ICT projects and programmes and how they relate to council services, improvement programmes and strategic priorities
- To ensure that the Councils make best use of their existing Information Systems and expertise and take a corporate view on a common strategy to encourage harmonisation, avoid duplication and integration / accessibility obstacles and to maximise efficiencies
- Assess the overall priorities and investment requirements of major ICT projects and programmes and make recommendations to the councils
- To communicate the outcomes and decisions made by this group as well as ICT developments to stakeholders and users at both councils.
- Promote team-work and good relations, capture and share best practice, provide a forum for corporate innovation and creativity and celebrate successes

Deliverables:

- To review Capita SIS's performance and progress in relation to the contracted transition/transformation schedule.
- To lead on the development of the ICT strategy.
- To fully evaluate all requests for ICT projects. Consider their impact on the current IT priorities, IT Systems and Operations, their expected benefits in terms of efficiency and cost and agree a timeframe for implementation. Approval would be subject to funding.
- Review and approve Corporate ICT policies and procedures
- Support initiatives to improve Information Security standards and related compliance
- Review Information Security incidents

- Monitor and evaluate IT risks, including business continuity and disaster recovery provision
- Monitor progress of all IT related projects

Membership:

There is representation at a Senior level of both Three Rivers District and Watford Borough Council:

| | | |
|--------------------|---|--|
| Joanne Wagstaffe | - | Shared Director of Finance |
| Lesley Palumbo | - | Head of Corporate Strategy and Client Services (WBC) (Chair) |
| Alan Gough | - | Head of Community and Customer Services (WBC) |
| Geof Muggeridge | - | Director of Community & Environmental Services (TRDC) |
| Billy Hall | - | Customer Service Centre Manager (TRDC) |
| Jane Custance | - | Head of Planning and Development(WBC) |
| Emma Tiernan | - | ICT Client Manager |
| Allan Caton | - | ICT Client Manager |
| Shaun Cornwell | - | Account Director - Capita SIS |
| Richard Paszkowski | - | Account Manager - Capita SIS |
| Mike Airey | - | Programme Manager - Capita SIS |
| Jerry Fairgrieve | - | Service Delivery Manager - Capita SIS |

Operating Arrangements:

- Meetings every 5 to 6 weeks – Agenda is separated between Council and Capita SIS business
- Reports (ICT core message) to TRDC Management Board and WBC Leadership Team
- Project monitoring tool
- Minutes to be published – Intranet

Initial Priorities:

The initial priorities for 13/14 & 14/15 are based around

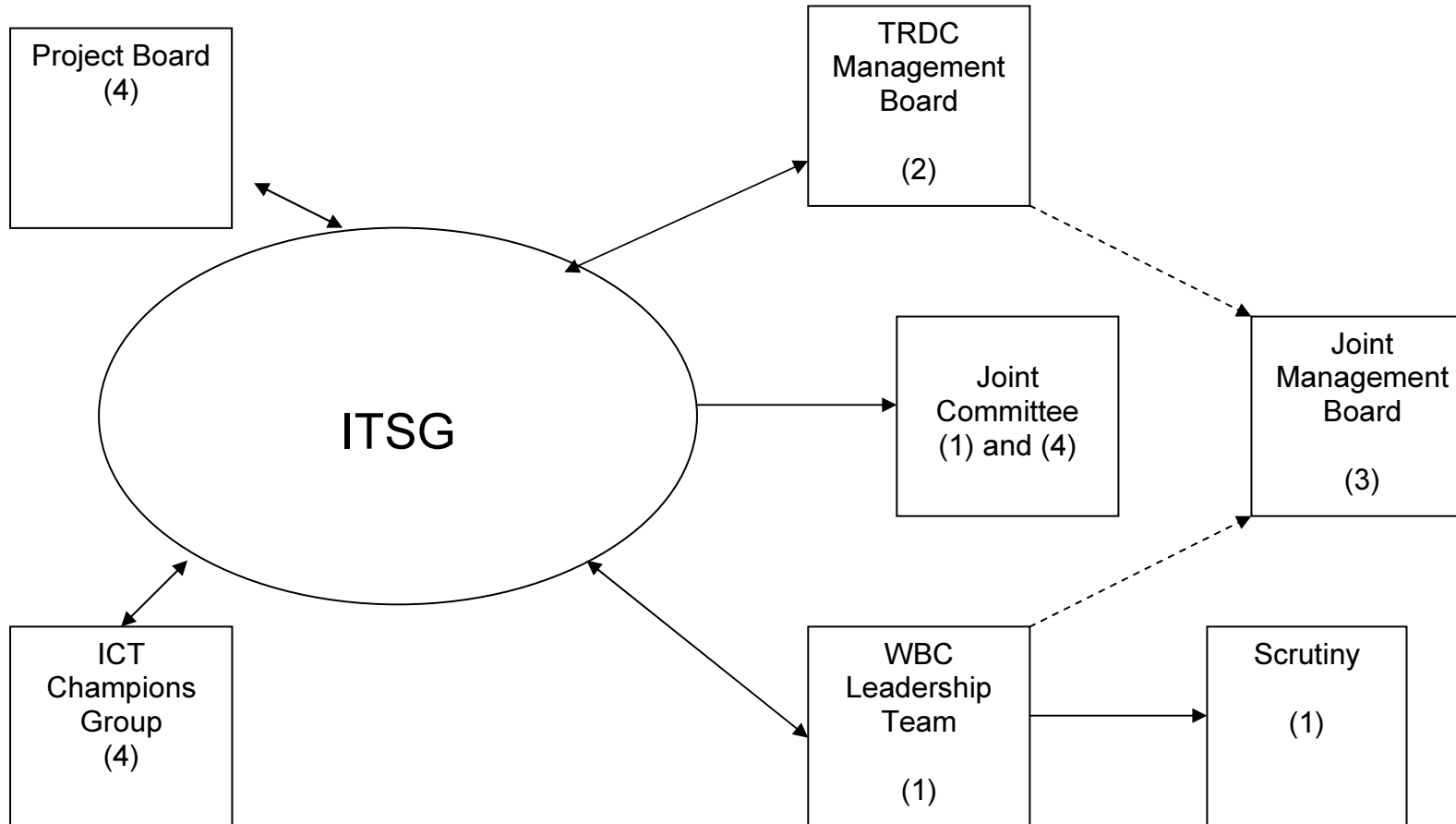
- Development of the W3R Corporate ICT Strategy, including initial technical roadmap
- Capita Contract – Monitoring and effectiveness
- Government directives for PSN (Public Services Network)

Appendix A:

ITSG Governance Model

Reporting Lines:

1. Lesley Palumbo (ITSG Chair)
2. Geof Mugeridge
3. Joanne Wagstaffe
4. ICT Client Managers

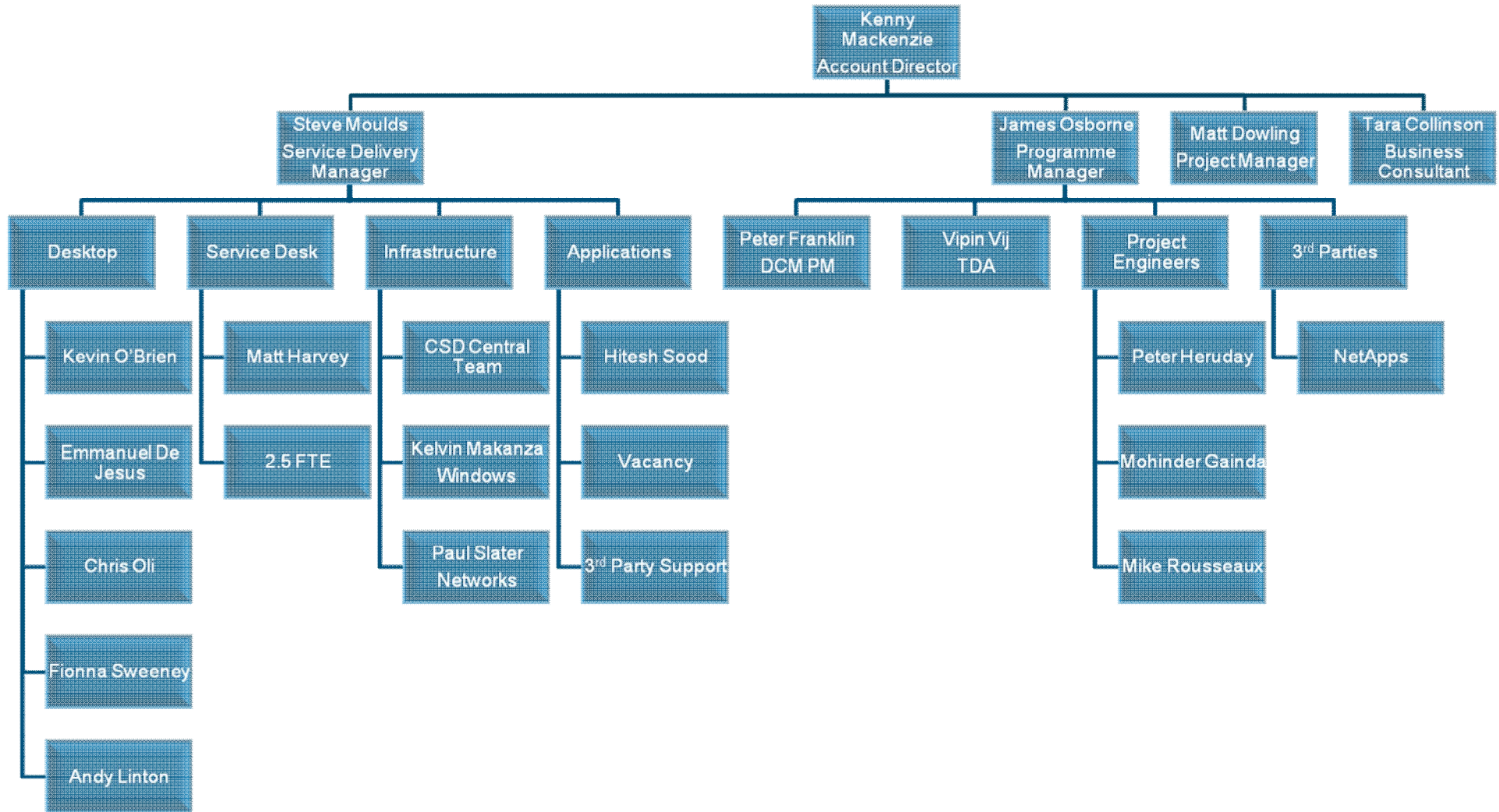


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W3R – Capita Organisation Chart

1st September 2014

Capita Team Structure



Agenda Item 8

Outsourced Services Scrutiny Panel Work Programme 2014/15

| Date of Meeting | Item for agenda | Officer |
|--------------------------|--|---|
| 8 July 2014 | Terms of reference | Committee and Scrutiny Support Officer |
| | Introduction to Shared Services Lead Authority model | Director of Finance |
| | Actions and questions update | Committee and Scrutiny Support Officer |
| | Work programme | Committee and Scrutiny Support Officer |
| | Performance indicators (quarter 4 2013/14) | Partnerships and Performance Section Head |
| 23 September 2014 | Update on Revenues and Benefits | Head of Revenues and Benefits |
| | Actions and questions update | Committee and Scrutiny Support Officer |
| | Performance report (quarter 1 2014/15) | Partnerships and Performance Section Head |
| 22 October 2014 | ICT contract with Capita | Director of Finance / ICT Client Manager |
| | Actions and questions update | Committee and Scrutiny Support Officer |
| | Feedback from visit to the depot | Councillors |
| | Work programme | Committee and Scrutiny Support Officer |
| 26 November 2014 | Update on Veolia contract - parks and street cleansing | Contract Manager |
| | Actions and questions update | Committee and Scrutiny Support Officer |

| Date of Meeting | Item for agenda | Officer |
|-------------------------|--|---|
| | Performance report (quarter 2 2014/15) | Partnerships and Performance Section Head |
| 7 January 2015 | SLM and the leisure centres | Head of Corporate Strategy and Client Services |
| | Parking Service annual report | Transport and Infrastructure Section Head / Parking Manager |
| | Actions and questions update | Committee and Scrutiny Support Officer |
| 12 February 2015 | Update on Veolia contract - waste and recycling | Contract Manager |
| | Actions and questions update | Committee and Scrutiny Support Officer |
| | Performance report (quarter 3 2014/15) | Partnerships and Performance Section Head |

Topics for 2015/16

July 2015 – Revenues and Benefits Update

Hostels and temporary accommodation